9. U 4 (64)

CITY OF WAKEFIELD.

REPORT

BUREAU OF HYGIENE & TROPICAL DISEASE
LIBRARY
[illegible] JUN. 1934

ON THE

PUBLIC HEALTH

AND

SANITARY STATE

OF THE

CITY OF WAKEFIELD

FOR THE YEAR 1933,

BY

THOMAS GIBSON, M.D,, C.M., D.P.H.,
MEDICAL OFFICER OF HEALTH.

"Express" Series, Ltd., 34, Southgate, Wakefield.

66478

LONDON SCH... HYGIENE ★ AND TROPICAL MEDICINE ★
LIBRARY
21 NOV 1967

CITY OF WAKEFIELD.

REPORT

ON THE

PUBLIC HEALTH
AND
SANITARY STATE
OF THE
CITY OF WAKEFIELD
FOR THE YEAR 1933,

BY

THOMAS GIBSON, M.D,, C.M., D.P.H.,
MEDICAL OFFICER OF HEALTH.

INDEX.

Page.
Anti-Diphtheria Immunisation Clinic 17, 66
Ante-natal Clinic 85
Artificial Sunlight Clinic 101
Atmospheric Pollution 29
Bacteriological Reports 71
Births 4
Blindness 112
Cerebrospinal Fever 60
Child Welfare Centres 94
Common Lodging Houses 27
Deaths 6
Diphtheria 55, 61
Disinfection 71
Dysentery 59
Enteric Fever 58
Factories, Workshops and Workplaces 47
Food and Drugs—Analysis 37
Health Education 111
Health Visitors—Home Visiting 93
Hospital—Infectious Diseases 60
Hospital—Maternity 87
Health Services 16
Hospitals 17
Housing—General 49
Houses-let-in-lodgings 28
Infectious Diseases 55
Legislation in Force 16
Local Government Act 17
Marriages 4
Maternity and Child Welfare 84
Measles 59
Meat Inspection 42
Mental Deficiency 108
Meteorological Table 115
Midwives 16, 84
Milk Supply 32
Offensive Trades 46
Officers, Public Health 12
Ophthalmia Neonatorum 93
Orthopædic Clinic 101
Pemphigus Neonatorum 59, 93
Pneumonia 59
Postnatal Clinic 91
Puerperal Fever and Pyrexia 92
Sanitary Circumstances of the Area 18
Sanitary Inspection 20
Slaughterhouses 41
Scarlet Fever 57, 61
School Medical Service 109
Statistics General 4
Tuberculosis 72
Tuberculosis Dispensary 75
Tuberculosis—Sanatoria 77
Whooping Cough 59
Vaccination 71
Venereal Diseases 80

City of Wakefield

ANNUAL REPORT OF MEDICAL OFFICER OF HEALTH

BUREAU OF HYG
LIBRARY
14 AUG 1937

ERRATA

Page 5, Area in acres:-

Instead of "5,421", read "5,300".

Footnote to above, last sentence:-

Instead of "increased by 451 acres", read "increased by 329 acres".

Digitized by the Internet Archive
in 2018 with funding from
Wellcome Library

https://archive.org/details/b3022746x

PUBLIC HEALTH DEPARTMENT,
TOWN HALL,
WAKEFIELD,

8th May, 1934.

BUREAU OF HYGIENE & TROPICAL DISEASE
LIBRARY
5 JUL 1934

To the Mayor, Aldermen and Councillors
of the City of Wakefield.

MR. MAYOR, LADIES AND GENTLEMEN,

I beg to submit for your information and consideration a Report on the Public Health and Sanitary State of Wakefield for the year 1933.

In the preparation of the Report, which follows the lines required by the Ministry of Health, I have received valuable assistance from many colleagues, particularly from Dr. Allardice, who has prepared the Report on Immunisation against Diphtheria, from Dr. Eeles, who has prepared the Maternity and Child Welfare Section, and from Mr. Roberts, who has prepared the Sanitary Administration Section.

I should like to take the opportunity of expressing my appreciation of the ungrudging help and loyal co-operation given me by all the Staff of this Department, both in the Town Hall and at the Hospitals.

I am,

Yours faithfully,

THOMAS GIBSON,

Medical Officer of Health.

(1).—GENERAL STATISTICS.

Area	4,970 acres.
Population (Census, 1931)	59,122.
Population (Estimated by Registrar-General at middle of 1933)	60,160.
Number of Inhabited Houses (Census, 1931)	14,219.
Rateable Value (1st April, 1933)	£343,519.
Sum represented by a Penny Rate (1933-34)	£1,345.

Population.

The total population at the middle of 1933, as estimated by the Registrar-General, was 60,160. The institutional population was 3,583, of which 3,028 were non-residents, and 555 were residents. The net population, excluding non-residents, was therefore 57,132, and this figure has been used as the basis for calculating the rates given in this Report, other than the infectious diseases attack rates, which are calculated on the total population.

(2).—EXTRACTS FROM THE VITAL STATISTICS OF 1933.

(1) Marriages.

384 marriages were celebrated, equal to a marriage rate of 13.4 persons married per 1,000 of the population, as compared with 16.1 in 1932, 17.3 in 1931, and 16.8 the average for the ten years, 1923-1932. The number of marriages was 72 less than in 1933.

(2) Births.

Excluding 119 non-resident births, and including 30 resident births which occurred outside the City, the total number of births registered in the City was 906 (468 males and 438 females), giving a birth rate of 15.8 per 1,000 of the population, as compared with 16.7 in 1932, and 18.3 the average for the ten years 1923-1932. The number of births in 1933 was 39 less than in 1932. The birth rate in England and Wales in 1933 was 14.4, and in the Large Towns 14.4. 28 births (3.09 per cent.) were illegitimate.

Under the Notification of Births Act, 983 births were notified, 554 from dwelling-houses, and 429 from institutions. Of the home confinements, 413 were attended by doctors, and 141 by midwives. The institution births include 340 in the Municipal Maternity Hospital, 33 in the County Hospital, 49 in a private maternity home, 6 in a private nursing home outside the City, and 1 in the Mental Hospital. 370 of the institution confinements were attended by midwives, and 59 by doctors. Of the registered births, 27 (2.7 per cent.) were not notified, as compared with 3.8 per cent in 1932, and 6 per cent. in 1931. 48 (4.8 per cent.) of the notified births were still births.

Remarks on the Birth Rate.

The Wakefield birth rate, like that of the country generally, is steadily declining year by year, but it is still somewhat higher than that of England and Wales. The difference between the birth rate and death rate also lessens year by year, and although the Registrar-General credits Wakefield with a population of 360 over that of 1932, the natural increase of the population, that is, the excess of births over deaths, was only 115, which is the smallest figure on record for the City. As the Census figures showed, families are becoming smaller, and as the marriage rate figures given above indicate, marriages are becoming fewer. We may therefore expect the birth rate declension to continue, and in a few years' time it will be a question whether the population will be able to maintain its level, or actually undergo a declension.

It will be noted that the illegitimate birth rate and the still-birth rate were much the same as in 1932. There was a decrease in the number of un-notified births.

CAUSES OF, AND AGES AT, DEATH DURING THE YEAR 1933.

Causes of Death.	Nett deaths at the sub-joined ages of Residents whether occurring within or without the district.									
	Total All Ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and under 75 years.	75 years and over.
All Causes Certified	791	67	17	24	38	24	98	212	173	138
Uncertified ...	—	—	—	—	—	—	—	—	—	—
Typhoid and Paratyphoid Fevers	—	—	—	—	—	—	—	—	—	—
Measles	4	1	2	1	—	—	—	—	—	—
Scarlet Fever	8	—	1	3	4	—	—	—	—	—
Whooping Cough	4	—	1	3	—	—	—	—	—	—
Diphtheria	19	—	—	3	16	—	—	—	—	—
Influenza	29	3	1	1	1	1	8	5	4	5
Encephalitis Lethargica	1	—	—	—	—	—	—	1	—	—
Cerebrospinal Fever	1	—	—	1	—	—	—	—	—	—
Tuberculosis of Respiratory System	30	—	—	—	—	8	12	10	—	—
Other Tuberculous Diseases ...	7	—	1	3	—	1	2	—	—	—
Syphilis	—	—	—	—	—	—	—	—	—	—
General Paralysis of the insane, tabes dorsalis	3	—	—	—	—	—	1	1	1	—
Cancer	92	—	—	—	—	—	8	50	25	9
Diabetes	9	—	—	—	—	—	3	3	3	—
Cerebral Hæmorrhage, etc. ...	74	1	—	—	—	—	2	21	33	17
Heart Disease	125	—	—	—	3	7	16	32	42	25
Aneurysm	2	—	—	—	—	—	—	1	1	—
Other Circulatory Diseases ...	29	—	—	—	—	—	—	7	16	6
Bronchitis	52	4	4	—	1	—	3	13	11	16
Pneumonia (all forms)	51	7	4	7	4	1	9	9	5	5
Other Respiratory Diseases ...	9	—	—	—	—	—	3	5	1	—
Ulcer of Stomach and Duodenum	7	—	—	—	—	1	1	3	2	—
Diarrhœa, etc. (under 2 years) ...	7	6	1	—	—	—	—	—	—	—
Appendicitis	5	—	—	—	1	1	2	—	—	1
Cirrhosis of Liver	—	—	—	—	—	—	—	—	—	—
Other Diseases of Liver, etc. ...	2	—	—	—	—	—	—	—	2	—
Other Digestive Diseases	11	1	—	—	1	—	1	3	3	2
Acute and Chronic Nephritis ...	23	—	1	1	—	1	2	11	5	2
Puerperal Sepsis	1	—	—	—	—	—	1	—	—	—
Other Puerperal Causes	5	—	—	—	—	1	4	—	—	—
Congenital Debility, Premature Birth, Malformations, etc. ...	38	37	—	1	—	—	—	—	—	—
Senility	51	—	—	—	—	—	—	1	8	42
Suicide	12	—	—	—	—	—	1	9	2	—
Other Violence	15	—	—	—	3	1	3	5	—	3
Other Defined Causes	62	5	1	—	4	1	16	22	9	4
Causes Ill-defined or Unknown ...	3	2	—	—	—	—	—	—	—	1
Totals	791	67	17	24	38	24	98	212	173	138

The total number of deaths registered in Wakefield was 1,120, including 355 non-residents. In addition, 26 deaths of residents occurred outside the city. The number of resident deaths was therefore 791 (422 males and 369 females), giving a death rate of 13.8 per 1,000 of the population, as compared with 13.4 in 1932, and 13.1 the average for the ten years 1923-1932. In 1933, the number of deaths was 32 more than in 1932. The 1933 general death rate in England and Wales was 12.3, and in the Large Towns 12.2. All the deaths were certified. 262 (33 per cent.) of the resident deaths occurred in Institutions.

The number and percentage of deaths at the various age periods were:—

Age period.	Number of Deaths, 1933.	Percentage 1933.	Percentage 1932.
Under 1 year	67	8.5	8.9
1—2 years	17	2.1	2.2
2—5 ,, ...	24	3.0	3.0
5—15 ,, ...	38	4.8	5.3
15—25 ,, ...	24	3.0	3.7
25—45 ,, ...	98	12.4	11.1
45—65 ,, ...	212	26.8	23.1
65—75 ,, ...	173	21.9	22.5
Over 75 years	138	17.5	20.2
Total	791	100.0	100.0

The following table gives the chief causes of death:—

Causes of Death.	No. of deaths 1933.	Males.	Females.	Percentage of total deaths 1933.	Percentage of total deaths 1932.
Heart Disease ...	125	62	63	15.8	16.6
Cancer	92	33	59	11.6	9.9
Cerebral Hæmorrhage	74	35	39	9.5	10.5
Bronchitis	52	30	22	6.6	6.5
Pneumonia (all forms)	51	38	13	6.4	4.9
Senility	51	17	34	6.4	6.1
Congenital Debility, Malformations, Premature Birth, etc.	38	21	17	4.8	3.8
Tuberculosis (all forms)	37	23	14	4.7	4.9
Influenza	29	14	15	3.7	2.6
Nephritis	23	11	12	2.9	4.2
Diphtheria	19	9	10	2.4	3.8

There were 125 deaths from Heart Disease (62 males and 63 females), giving a death rate of 2.19, as compared with 2.23 in 1932 and 1.83 the average for the ten years 1923-32. The number of deaths was 1 less than in 1932. 79 per cent. of the deaths were of persons 45 years of age and over, and 20 per cent. of persons over 75 years of age.

There were 92 deaths from Cancer (33 males and 59 females), giving a death rate of 1.61, as compared with 1.33 in 1932 and 1.38 the average for the ten years 1923-32. The number of deaths was 17 more than in 1932.

There were 74 deaths from Cerebral Hæmorrhage (35 males and 39 females), giving a death rate of 1.29, as compared with 1.41 in 1932, 1.03 in 1931, and 1.09 in 1930. The number of deaths was 6 less than in 1932.

There were 52 deaths from Bronchitis (30 males and 22 females), giving a death rate of 0.91, as compared with 0.87 in 1932, and 1.11 the average for the ten years 1923-32. The number of deaths was 3 more than in 1932.

There were 51 deaths from Senility (17 males and 34 females), giving a death rate of 0.89, as compared with 0.81 in 1932 and 0.39 in 1931.

There were 51 deaths from Pneumonia (38 males and 13 females), giving a death rate of 0.89, as compared with 0.65 in 1932 and 1.10 the average for the ten years 1923-32. The number of deaths was 14 more than in 1932.

There were 37 deaths from Tuberculosis (all forms) (23 males and 14 females), giving a death rate of 0.65, as compared with 0.88 in 1932, and 1.02 the average for the ten years 1923-32. The number of deaths was 13 less than in 1932.

There were 30 deaths from Pulmonary Tuberculosis (21 males and 9 females), giving a death rate of 0.52 as compared with 0.73 in 1932 and 0.75 the average for the ten years 1923-32. The number of deaths was 11 less than in 1932.

There were 7 deaths from Non-pulmonary Tuberculosis (2 males and 5 females), giving a death rate of 0.12, as compared with 0.16 in 1932, and 0.27 the average for the ten years 1923-32. The number of deaths was 2 less than in 1932.

There were 7 deaths of infants under 2 years of age from Diarrhœa and Enteritis, giving a death rate of 7.7 per 1,000 births, as compared with 12.7 in 1932 and 13.3 the average for the ten years 1923-32. The corresponding rate in England and Wales in 1933 was 7.1.

The number of infantile deaths (i.e., under one year of age) was 67 (42 males and 25 females), giving an infant mortality of 74 per 1,000 births, as compared with 72 in 1932, and 79 the average for the ten years 1923-32. The corresponding rate for England and Wales in 1933 was 64, and in the Large Towns 67.

In the first quarter of the year, the rate was 119, in the second quarter 49, in the third quarter 79, and in the fourth quarter 49. The legitimate infantile mortality was 72, and the illegitimate 143 per 1,000 births.

The neo-natal mortality (i.e. the mortality during the first month of life) was 45 per 1,000 births, as compared with 30 in 1932, and 35 the average for the ten years 1923-32.

The infantile mortality in the various Wards was as follows:—

South Westgate	176	Kirkgate	92	Alverthorpe	45
St. John's	125	Northgate	77	North Westgate	41
Belle Vue	101	Sandal	77	Calder	33
Primrose Hill	95	Eastmoor	53		

The causes of infantile mortality were:—Congenital Debility, Premature Birth, Malformation, etc., 37, Pneumonia 7, Diarrhœa and Enteritis 6, Bronchitis 4, Influenza 3, Measles 1, Cerebral Hæmorrhage 1, Other Causes 8. 49 per cent. of the infantile deaths occurred in the first week, 61 per cent. in the first month, and 83 per cent. in the first six months of life.

The mortality amongst males was 90 per 1,000 male births, and amongst females 57 per 1,000 female births.

There were 6 maternal deaths from diseases and accidents of pregnancy and parturition, giving a mortality of 6.62 per 1,000 births, as compared with 7.41 in 1932 and 5.89 the average for the ten years 1923-32. There was one death from Puerperal Sepsis included in the above, and in this case the illness followed an abortion. Two of the deaths occurred in the Maternity Hospital, two in the Clayton Hospital, one in a private nursing home, and one at home.

The 15 deaths from Violence included 6 from vehicular accidents, 2 from drowning, 1 from manslaughter, 1 from a colliery accident, 1 from scalding, 1 from burns, 1 from a fall from a roof, 1 from a fall through old age, and 1 from injuries caused by the overturning of a paving stone.

There were also 12 suicidal deaths, comprising suicide by drowning—6, by coal-gas poisoning—3, and by hanging—3.

80 inquests were held during the year, 51 on residents and 29 on non-residents.

Remarks on the Death Rate.

It will be noted that the death rate is slightly higher than that of 1932, and higher than the average of the preceding ten years, while it continues higher than that of the country generally.

With regard to the causes of mortality, Heart Disease still heads the list, although the number of deaths did not exceed that of 1932. There was, however, an increase in the number of deaths from Cancer and Pneumonia. It is gratifying to note the continued declension in the Tuberculosis mortality, most notably in that of the pulmonary disease. The infantile mortality was slightly higher than that of 1932, but was still lower than the average for the preceding ten years. Although the neo-natal mortality for 1933 was higher than that of the previous year, it is interesting to note that there is a tendency for this mortality to decline. The average neo-natal mortality for the ten years 1904 to 1913 was 44, for the ten years 1914 to 1923 it was 42, and for the ten years 1924 to 1933 it was 35. The main reduction in infant mortality has, of course, been amongst children over one month, but there has been, as these figures indicate, a certain improvement in the mortality during the first month of life.

GENERAL PROVISION OF HEALTH SERVICES.

Public Health Officers.

The following are the officers of the Public Health Department:—

Name.	Qualifications.	Office held.
Thomas Gibson ...	M.D., C.M. (Edin.) D.P.H.	Medical Officer of Health. School Medical Officer. Tuberculosis Officer. Medical Officer for Maternity Hospital and Child Welfare Centres. Medical Superintendent of the Fever Hospital. Medical Officer under the Mental Deficiency Act. Police Surgeon.
Frank Allardice ...	M.D., Ch.B., D.P.H. (Edin.)	Deputy Medical Officer of Health. Assistant School Medical Officer and School Ophthalmologist. Assistant Medical Officer for Maternity and Child Welfare.
Jessie Eeles ...	M.D., Ch.B. (Edin.) ...	Assistant Medical Officer. Assistant Medical Officer for Maternity and Child Welfare. Assistant School Medical Officer.
J. W. Thomson ...	M.B., C.M. (Aberdeen) ...	Consulting Obstetric Surgeon (Part time).
A.W. Frew ...	L.R.C.P., L.R.C.S., L.R.F.P.S., D.P.H., R.C.P.S. (Edin.) ...	Medical Officer for Venereal Diseases (Part time).
H. L. Crockatt ...	M.B., Ch.B. (Leeds) ...	Consulting Orthopædic Surgeon (Part time).
William Roberts...	Certificates of Royal Sanitary Institute for (1) Inspector of Nuisances and (2) Inspector of Meat and other Foods ...	Senior Sanitary Inspector. Inspector of Meat and other Foods. Inspector under the Housing Regulations. Inspector of Canal Boats.

Name.	Qualifications.	Office held.
William V. Hargreave ...	Certificates of Royal Sanitary Institute for (1) Sanitary Inspectors. (2) Inspector of Meat and other Foods ... (3) Sanitary Science ...	Deputy Senior Sanitary Inspector. District Sanitary Inspector. Inspector of Meat and Other Foods. Inspector under the Housing Regulations.
William Dawson ...	Certificates of Royal Sanitary Institute for (1) Sanitary Inspectors. (2) Inspector of Meat and other Foods ... (3) Smoke Inspection ... Certificate of the Company of Plumbers	District Sanitary Inspector. Inspector of Meat and Other Foods. Inspector under the Housing Regulations.
John P. Whitehead	Certificate of Royal Sanitary Institute for (1) Sanitary Inspectors, and (2) Inspector of Meat and other Foods ...	Ditto.
Clifford A. Murray	Certificate of Royal Sanitary Institute for (1) Sanitary Inspectors. (2) Inspector of Meat and Other Foods ...	Ditto.
Sarah S. Thorp ...	Certificate of Royal Sanitary Institute for (1) Inspector of Nuisances (2) Maternity and Child Welfare, and (3) Health Visitor and School Nurse. C.M.B. Certificate ... New Certificate of Royal Sanitary Institute for Health Visitors ...	Senior Health Visitor. Superintendent, Belle Vue Child Welfare Centre. School Nurse. Tuberculosis Nurse.
Hilda Staniforth	Trained Nurse ... ... C.M.B. Certificate ... ... Certificate of Royal Sanitary Institute for (1) Inspector of Nuisances (2) Health Visitor, and (3) School Nurse ... New Certificate of Royal Sanitary Institute for Health Visitors.	Health Visitor. School Nurse. Tuberculosis Nurse. Superintendent, Eastmoor District Child Welfare Centre (held at Principal Centre).

Name.	Qualifications.	Office held.
Hilda Robertshaw.	Trained Nurse. ... ... C.M.B. Certificate. New Certificate of Royal Sanitary Institute for Health Visitors.	Health Visitor. School Nurse. Tuberculosis Nurse. Superintendent, Thornes Lane District Child Welfare Centre (held at Principal Centre).
Maggie Dearden ...	Trained Nurse ... ... C.M.B. Certificate. New Certificate of Royal Sanitary Institute for Health Visitors.	Health Visitor. School Nurse. Tuberculosis Nurse. Superintendent, Snapethorpe Hall Child Welfare Centre.
Jennett Gardner...	Trained Nurse ... ... C.M.B. Certificate. New Certificate of Royal Sanitary Institute for Health Visitors.	Health Visitor. School Nurse. Tuberculosis Nurse. Superintendent, South Westgate District Child Welfare Centre (held at the Principal Centre).
Ethel W. Farrar...	Trained Nurse ... ... C.M.B. Certificate. New Certificate of Royal Sanitary Institute for Health Visitors.	Health Visitor. School Nurse. Tuberculosis Nurse. Superintendent Northgate District Child Welfare Centre (held at Principal Centre).
Olive I. Burton ...	Trained Nurse ... ... Certificates of Chartered Society of Massage and Medical Gymnastics for (1) Massage, and (2) Swedish Remedial Exercises.	Orthopædic and Ultra-Violet Ray Clinic Nurse. Nurse at Principal Child Welfare Centre.
A. J. Peck ...	Trained Fever Nurse ...	Matron of City Fever Hospital.
Kate P. Perkins...	Trained Nurse ... ... C.M.B. Certificate.	Matron of Maternity Hospital.
Herbert Pollard...	M.R.C.V.S.	Veterinary Surgeon. Veterinary Inspector of Dairy Cows (Part time Officer).
F. W. Richardson.	F.I.C.	Analyst of Food, Drugs, and Fertilizers (Part-time Officer).

The Clerical Staff consists of:—

General.

William V. Morris, Chief Clerk and Vaccination Officer.
Ronald Shaw.
Edward Land.
Harold Nield.

Maternity and Child Welfare.

Beatrice Lake (Part-time School Medical Service).
Mary T. Kelly, Clerk and Assistant at the Principal Child Welfare Centre.

School Medical Service.

Herbert W. Tate.

Sanitary Inspector's Office.

George O. Allen (Clerk and Assistant Sanitary Inspector).
Herbert H. Johnson (temporarily transferred from Housing Department).

The Corporation also employs two Salaried District Midwives.

Mr. Arthur Seaton, District Sanitary Inspector, and Mr. Harold F. Jowett, Deputy Senior Sanitary Inspector, left the service of the Corporation in May and July respectively, in order to take up other appointments.

Mr. William V. Hargreave was appointed Deputy Senior Sanitary Inspector, and the resulting vacancies for District Sanitary Inspectors were filled by the appointment of Mr. John P. Whitehead, who commenced duties on 1st June, and Mr. Clifford A. Murray, who commenced on 17th July.

On account of the increased work in connection with the Housing Act, 1930, it was necessary during the year to make two additions to the staff. Mr. H. H. Johnson, a clerk in the Housing Department, was temporarily transferred in May to the Sanitary Inspector's Office, and a Junior Clerk—Harold Nield, was appointed in July.

Professional Nursing in the Home.

(a) General.

This is chiefly provided by the local Nursing Association, which employs six Nurses. The Corporation has an arrange-with the Association for the home nursing of cases of puerperal pyrexia when required. One large engineering firm employs a Nurse to attend to their employees and their families.

(b) Infectious Diseases.

The Health Visitors render assistance in the home nursing of cases of Measles, Whooping Cough, Ophthalmia Neonatorum, Pneumonia, etc.

Midwives.

During 1933 18 midwives gave notice of intention to practise, including 3 at the Maternity Hospital, 6 at the County Hospital, and 2 at a Private Maternity Home.

Laboratory Facilities.

By arrangement with the West Riding County Council, the Wakefield Corporation is provided with facilities for pathological examinations at the County Hall Laboratory. These arrangements include the bacteriological examination of water, milk, and pathological specimens. Chemical and bacteriological examinations of the Wakefield Corporation water supply are made in the Laboratory of the West Riding Rivers Board. The Chemical analysis of food, drugs, and fertilisers is carried out by Mr. F. W. Richardson, F.I.C., of Bradford.

Legislation in Force.

There have been no changes or additions to the general and local public health legislation in force in the City, a summary of which appeared in my Annual Report for 1931.

Maternity and Nursing Homes.

There was one Maternity Home and one Nursing Home on the Register at the end of the year. No new applications for registration, or exemption from registration, were received.

Maternal Mortality.

Investigations are made into all maternal deaths and cases of puerperal fever and pyrexia by Dr. Jessie Eeles, Medical Officer for Maternity and Child Welfare. Special reports on maternal deaths are sent to the Ministry of Health Committee on Maternal Mortality.

Ambulance Facilities.

(1) For infectious cases, 2 motor ambulances are provided by the Corporation at the Fever Hospital. By arrangement with the Corporation, the Smallpox Motor Ambulance, belonging to the Wakefield and District Smallpox Hospital Committee is garaged at the Fever Hospital, and is worked by the Corporation driver.

(2) For non-infectious and accident cases, 2 Motor Ambulances are provided at the Police Station.

CLINICS AND TREATMENT CENTRES.

The full list of Clinics and Treatment Centres, given in my Annual Report for 1931, still stands good, except that the Monday afternoon session of the Tuberculosis Dispensary has been discontinued.

An Anti-Diphtheria Immunisation Clinic was commenced on 26th February, 1932. The Clinic is held at the Principal Child Welfare Centre, Margaret Street, each Friday afternoon. During part of the year, it was necessary to hold an additional weekly session on Wednesday afternoons, owing to the long waiting list.

LOCAL GOVERNMENT ACT, 1929.

The arrangements made under the above Act were described in my Annual Report for 1931, and no changes have taken place during the year.

POOR LAW MEDICAL OUT-RELIEF.

No changes have taken place in the arrangements made for this service.

HOSPITALS.

No changes have occurred during the year.

The building of the new Fever Hospital at Snapethorpe was continued during the year, and it is hoped that the work will be completed about the middle of the present year.

Work was commenced in September, 1933, on the building of the new Maternity Hospital at Manygates Park.

SANITARY CIRCUMSTANCES OF THE AREA.

Water Supply.

The water was regularly tested, both chemically and bacteriologically, during the year, and the reports were all satisfactory.

Drainage, Sewerage, and Sewage Treatment.

(I am obliged for the information given under this heading, and also under that of "Public Cleansing," to Mr. L. Ives, the City Surveyor).

No extensions of any magnitude to the sewerage system have been carried out during the last financial year.

Very good progress has been made in the construction of the extensions to the Calder Vale Sewage Disposal Works, for which a loan was obtained with the sanction of the Ministry of Health, the estimated cost of the scheme being £55,000.

The works comprise three new Bio-Aeration Units, complete with two Paddle Power Houses and equipment, 12 pyramidal Sludge Separating Tanks, and combined Effluent and Return Sludge Pumping Station. The effluent from the Bio-Aeration Tank will be pumped on to the existing Percolating Filter which is being remodelled and provided with 26 Revolving Distributors. The Scheme also provides for additional 1st Lift Pumping Plant, improvements to the existing Precipitation Tanks, etc.

Public Cleansing.

(*a*) Method of Collecting dry house refuse.	The contents of the house bins are emptied into galvanised iron skips, and the refuse deposited into carts provided with canvas covers, also motor refuse collecting vehicles, fitted with roller canvas covers.

(*b*) Method of collecting refuse from earth closets and privies.	Earth closets and privies (of which there are now very few) are emptied at night. The tubs are taken away complete and returned in a special wagon with wooden doors. The contents of privies are loaded into a covered motor vehicle.
(*c*) Method of disposing of dry house refuse.	Controlled tipping on the same lines as at Bradford.
(*d*) The method of disposing of refuse from earth closets and privies.	Stacked and covered with soil on farm land and afterwards ploughed in.
(*e*) Method of cleansing cesspools.	Contents pumped into horse drawn steel sludge tank.
(*f*) Arrangements for the disposal of cesspool contents.	Mostly spread on to grass land, exceptional cases deposited into sewers which immediately afterwards are properly flushed.
(*g*) Ashbin maintenance under the Wakefield Corporation Act, 1924 (Section 125).	On the 31st March, 1934, the number of ashbins maintained by the Corporation was 4,868, for which a charge of one shilling per bin per year is made.

Closet Accommodation.

See Sanitary Inspector's Report.

SANITARY INSPECTION OF THE AREA.

By William Roberts, Senior Sanitary Inspector.

Notices Served.

Informal Notices served	394
Informal Notices complied with	373
Statutory Notices served	25
Statutory Notices complied with	22
Notices outstanding at end of 1933	24
Premises where work has been carried out by Verbal Notice or without notice	251
Letters sent	159
Matters referred to City Surveyor	72
Matters referred to Waterworks Engineer	25
Complaints received	793
Complaints confirmed	719
Nuisances found	214

SYNOPSIS OF INSPECTION WORK.

Total Number of Inspections made	14,521
Total Number of Re-Inspections made	1,738

	Inspections.	*Re-inspections.*
Dwelling Houses.		
Ordinary	665	358
Infectious Disease	507	260
Housing Consolidated Regulations, 1925	168	370
Housing Act, 1930 (Special Surveys, Clearance, etc., Areas)	1105	134
Sanitary Conveniences.		
Water Closets	169	36
Privies and Tub Closets	49	—
Urinals	30	2
Refuse Storage.		
Ashplaces	135	115
Ashbins	261	126
Drains.		
Inspections	266	78
Smoke Tests	35	—
Chemical Tests	11	—

	Inspections.	*Re-inspections.*
Sewers, etc.		
Sewers	13	4
Street Gullies	163	33
Factories and Workshops, etc.		
Factories	14	3
Workshops (Excluding Bakehouses)	173	31
Workshops (Including Restaurant, Kitchens and Stables)	56	15
Bakehouses (Factory)	38	8
Bakehouses (Non-Factory)	92	14
Outworkers	—	—
Miscellaneous.		
Borough Market	207	—
Butchers' Shops (Stalls, etc.)	780	—
Cold Stores	40	—
Common Lodging-Houses	65	2
Canal Boats	29	—
Cowsheds	81	2
Cattle Market	78	—
Dairies, Milk Shops, and Milk Stores	339	5
Dangerous Structures	14	13
Entertainment Houses	35	2
Fishmongers' Shops and Stalls	425	—
Houses Let in Lodgings	30	27
Ice Cream Premises	28	3
Meetings with Owners or Tradesmen	508	—
Miscellaneous (Including Cesspools, Water Courses, Refuse Tips, etc.)	143	—
Offensive Trades (Including Fish Fryers)	210	22
Piggeries	44	4
Slaughter-houses—Public	1276	—
Private	2633	—
Special Notices of Slaughter	39	—
Smoke Observations	48	—
Schools	6	12
Streets or Back Roads	38	—
Special Visits	2743	—

	Inspections.	Re-Inspections.
Sanitary Inspections	1112	—
Van Dwellings	20	1
Visits under Rats and Mice Destruction Act	83	9
Yards and Courts	110	49

SUMMARY OF SANITARY IMPROVEMENTS CARRIED OUT UNDER PUBLIC HEALTH ACTS, 1875—1925.

Dwelling Houses.

Cleansed or Limewashed	30
Overcrowding Abated	10
Ventilation Improved	11
Roofs Repaired	28
Eaves Spouts, or Rain Water Fall Pipes Repaired	41
External walls, chimneys, repaired or re-pointed	10
Inside walls, ceilings, etc., repaired	54
New Floors laid or repaired	25
Floors ventilated	1
Doors repaired	10
Fireplaces, etc., repaired	37
Water Supply improved	6
Wells Abolished	1
Yards paved	39
Yards cleansed	11
Food Stores improved	2
Washing Accommodation improved	8
Living Vans removed	3
Dangerous Structures removed	3

Drains.

Opened out for inspection	32
Repaired	58
Re-constructed	13
Inspection Chambers constructed	5
Drains choked	509
Drains cleansed by Corporation Drain Cleanser ...	422
Drains cleansed by Owners	87
Drains ventilated	11
Drains removed from inside buildings	2
Drains disconnected from sewer	2
New Drains provided	22
Cesspool repaired	1

Accumulations Removed.

Manure	7
Other	23
Manure Receptacles provided	7

Animals, Poultry, etc.

Nuisances abated	9

Ashbins, Ashplaces.

Movable galvanised iron ashbins renewed (at shops, stores, etc.)	33
Movable galvanised iron ashbins provided in lieu of ashpits	28
Dry ashplaces abolished	13
Dry ashplaces repaired	8
Intimations sent to City Surveyor (Movable galvanised iron ashbins requiring renewal at 113 dwelling-houses)	99

Urinals.

Urinals cleansed or improved	2
New Urinals provided	3
Repaired	1
Abolished	1

Sinks.

New Sinks provided	31
Sink Waste Pipes trapped	1
Sink Waste Pipes repaired	42
Other Waste Pipes repaired	1

Piggeries.

Swine Removed	2

Water Closets.

Cleansed or Limewashed	20
Repaired	120
Additional provided	20
Re-constructed	16

SUMMARY OF SANITARY IMPROVEMENTS CARRIED OUT UNDER HOUSING ACTS.

Dwelling Houses.

Lighting Improved	2

Ventilation Improved	70
Windows Repaired	28
Roofs repaired	37
Eaves Spouts, or Rain Water Fall Pipes repaired	70
External walls, chimneys, etc., repaired or re-pointed	63
Inside walls, ceiling, etc., repaired	70
New floors laid or repaired	124
Fireplaces, ovens, or set pots repaired	74
Stairways repaired	14
Doors repaired	87
Washing Accommodation improved	23
Food Stores provided or improved	42
Yards paved	52
Water Supply improved	1

Drains.

Opened out	11
Repaired	11
Re-constructed	2
Disconnected from sewer	2
Rain water fall pipe disconnected from drain or sewer	2
Removed from inside buildings	2

Sinks.

New Sinks provided	33
Sink Waste Pipes trapped	1
Sink Waste Pipes repaired	12

Water Closets.

Additional provided	2
Repaired	32

Ashplaces.

Dry ashplaces repaired	5

Closet Accommodation.

The closet accommodation in the City is as follows:—

Water Closets (including 335 Trough Closets)	15,291
Privies	35
Tub Closets	14

During the year, no conversions have been carried out in connection with privies and pail closets, and the total number of this type of convenience remaining at the 31st December, 1933, was the same as last year, namely:—

Privy Closets.—35 (34 attached to dwelling-houses and 1 used in connection with a workshop).

Pail Closets.—14 (7 attached to dwelling-houses and 7 used in connection with workshops).

The closets are situate in the following Municipal Wards:—Alverthorpe (1 Privy Closet), North Westgate (1 Privy Closet), South Westgate (9 Privy Closets and 5 Pail Closets), Primrose Hill (1 Privy Closet and 7 Pail Closets), Calder (2 Privy Closets and 2 Pail Closets), Belle Vue (6 Privy Closets), Sandal (15 Privy Closets).

As pointed out in the Annual Report for 1932, the remaining privy and pail closets are situate in districts not provided with sewerage systems.

During the year, 10 Trough Closets were abolished, 5 being converted into water closets and 5 were dispensed with, on account of the properties being demolished.

CANAL BOATS.

The number of boats on the Register at the end of 1933 was 5, and 29 boats were inspected during the year.

The boats inspected were occupied by 52 males and 5 females, and in no instance were children found to be on board.

All the boats inspected were found to be in a clean and satisfactory condition, and it is pleasing to note that it was not necessary to draw attention to any contravention of the Canal Boats Acts.

STREET GULLIES.

Owing to the exceptionally hot summer experienced during the year, complaints continued to be made to the Health Department as to offensive smells emanating from street gullies in various parts of the City, and on this account, 71 gullies were trapped in order to mitigate the nuisance. A further improvement was effected during the year by the provision of a vacuum street gully emptier, which no doubt will expedite the work of cleansing and properly sealing those street gullies provided with traps.

RAT REPRESSION.

The repression of rats has continued to receive attention during the year, and arrangements for the observance of National Rat Week from the 6th to the 11th November were carried out.

The arrangements made in connection with this national effort were conducted on similar lines to those of 1932.

It is found that occupiers of premises infested with rats are endeavouring to exercise more prompt measures to combat the menace caused by rat infestation.

PRIVATE STREETS AND PAVING OF YARDS.

It is gratifying to be able to report that the question of paving of private streets and common yards has received more attention during the year. As a result 7 private streets were dealt with and made up.

The question of improvement in connection with private yards, particularly those having common usage, has continued to receive attention by the Public Health Department, and in this way 91 yards have been dealt with, either by way of renewals and improvements to existing paving or the paving with entirely new surface covering in the case of unpaved yards.

It is satisfactory to find that in the majority of cases the works were carried out on informal intimation, it being only necessary to issue Statutory Notices in 7 instances.

It is to be hoped that the paving of Private Streets will continue to receive serious consideration, as I cannot too strongly emphasise the decided benefits derived from such works.

PUBLIC CONVENIENCES.

I should like to direct attention to the need for taking into consideration the replacement or abolition of certain public conveniences at present in use in the City. The type of conveniences referred to are constructed of iron, and have been in existence for many years. They are not fitted up in such a way as to give adequate facilities for proper cleansing to be carried out, and in consequence they are liable to become offensive. In addition, they are lacking in suitable screening, and many are fixed in unsuitable positions. Whilst no doubt these conveniences have served a useful purposes in the past, it is found that many of them are becoming decrepit owing to age.

I may say that it has been necessary to remove one of the conveniences during the year owing to nuisance to properties adjoining.

COMMON LODGING HOUSES.

Number on Register at end of 1933.	For both Sexes.	For Men only.	Number of Persons Registered for.
12	5	7	630

5 Licences were not renewed during the year.

The houses so discontinued were of the older and out of date type, and gave accommodation for 89 persons. It is found that the demand for this type of house at the present time is only small, and in consequence the discontinuance of the houses referred to has not caused any shortage of accommodation in the City.

The following matters or contraventions of the Bye-laws were dealt with and remedied during the year:—

Cleansing	10	Roof Repaired	1
Water Closet Cleansed	2	Ventilation Improved	1
Water Closet Repaired	1	Floor Repaired	1
Vermin Infestation	1		

HOUSES LET IN LODGINGS.

Number on Register at end of 1933	16
Number taken off during the year	15
Number put on during the year	4
Total Accommodation (Adults) at end of year	426

The following matters or contraventions of the Bye-laws were dealt with and remedied during the year:—

Cleansing	8	Door	1
Water Closet	4	Fireplace	1
Drainage	4	Sink Waste Pipe Repaired	1
Vermin Infestation	2		
Accumulation	1		

In connection with the clearance of properties in New Street, a total of 14 houses let in lodgings have been discontinued.

The houses in question were those quite unsuitable to be used as Houses Let in Lodgings, and have never in fact fully complied with the Bye-laws governing this type of house.

It is mainly on account of the type of house referred to and the lack of housing accommodation that this particular class of house has continued to be used as houses let in lodgings.

In 16 cases it was necessary to ask for houses to be discontinued to be used as Houses Let in Lodgings on account of the buildings being unsuitable for occupation by members of more than one family.

Arising out of the discontinuance of the latter houses, it is found that many of the older and better class type of houses are commonly resorted to for occupation as Houses Let in Lodgings. This is mainly brought about by this type of house not having a ready demand for occupation solely by one family. Owing to the class of tenant subsequently occupying these houses, not being able to maintain same due to financial circumstances, it becomes necessary for them to sublet certain parts of the houses to other families. It should be explained that the class of house in question does not readily give facilities for the same to be adapted for occupation by several families, and at the same time comply with the requirements of the Bye-laws governing sub-let houses.

ATMOSPHERIC POLLUTION.

Emission of Smoke from Industrial Chimneys, 1933.

TABLE I.

No. of Boilers.	No. of Observations.	Dense Black Smoke.—Minutes in the Half-Hour.											
		Nil	½	1	2	3	4	5	5-10	10-15	15-20	20-25	25-30
1	20	11	1	3	2	1	—	1	1	—	—	—	—
2	8	4	—	3	—	—	—	—	1	—	—	—	—
3	11	4	—	5	—	1	—	—	1	—	—	—	—
4	1	1	—	—	—	—	—	—	—	—	—	—	—
5	1	1	—	—	—	—	—	—	—	—	—	—	—
7	7	3	—	2	1	—	—	—	1	—	—	—	—
Total	48	24	1	13	3	2	—	1	4	—	—	—	—

TABLE II.

Year.	No of Observ-ations.	Dense Black Smoke.—Minutes in the Hour. —Percentage.													
		Nil.	1	2	3	4	5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45
1923	257	34.6	11.2	7.3	5.8	6.6	7.7	11.6	5.0	4.2	3.5	1.1	8.3	0.3	—
1924	740	44.7	10.4	7.1	7.0	5.1	4.8	10.6	6.0	2.4	0.8	0.4	0.2	—	—
1925	318	52.2	12.2	10.6	9.6	3.4	3.4	5.0	1.5	0.6	0.9	—	—	—	—
1926	315	48.6	14.6	5.7	4.1	4.1	2.2	13.7	1.9	1.5	1.5	0.9	—	0.3	0.6
1927	925	57.9	9.5	8.6	2.2	5.4	0.2	8.8	4.7	0.6	1.2	0.1	0.3	—	—
1928	532	77.1	6.0	5.2	2.4	2.8	0.9	2.6	1.8	0.3	0.5	—	—	—	—
1929	76	59.21	5.26	13.1	6.6	2.6	2.6	—	—	—	—	—	—	—	—
1930	93	65.59	2.15	9.7	4.3	4.3	1.1	6.5	4.3	—	3.2	1.1	—	—	—
1931	55	60.00	16.36	3.63	1.81	1.81	1.81	1.81	—	—	3.63	—	—	—	—
1932	79	57.00	25.31	7.59	1.25	2.53	1.25	—	1.25	—	1.25	—	—	—	—
1933	48	50.00	29.16	6.25	4.08	—	2.08	8.33	—	—	—	—	—	—	—

TABLE III.

MONTHLY RECORD OF SOOT DEPOSITS IN STANDARD GAUGES, 1933.

Month.	Tons of Total Solids per Square Mile.	
	Northgate Station.	Clarence Park Station
January	17.62	6.13
February	31.46	8.98
March	22.69	6.27
April	20.22	9.86
May	24.45	10.57
June	21.66	9.95
July	21.72	9.53
August September }	33.72	15.26
October	19.36	8.98
November	21.83	9.42
December	20.99	10.12
Average per month	21.31	8.75.

During the year it was necessary to serve 5 notices of Offences under the Public Health (Smoke Abatement) Act, 1926, regarding the emission of Dense Black Smoke.

In each instance where it was necessary to serve notices regarding the emission of dense black smoke in excess of the standard set out in the Bye-laws, enquiries were made at the various firms concerned to ascertain the cause of such emissions. In all cases certain matters were in need of adjustment in connection with the methods of stoking and working of the boiler plants concerned, and subsequent observations of the respective chimneys showed that improvements had been effected.

Owing to the high pressure in which it has been necessary to carry out work required by the Ministry of Health, in connection with slum clearance programmes, it has not been possible to devote the usual amount of attention to the question of atmospheric pollution.

In all cases, however, where excessive emissions were observed special attention was directed to the chimneys concerned, with a view to bringing about an improvement, and it is in this connection that most of the observations recorded refer to this particular class of chimney.

The monthly record of soot deposits in standard gauges has continued to be carried out, and in this connection I should like to express indebtedness to J. H. Garner, Esq., B.Sc., Chief Inspector of the West Riding Rivers Board, who has kindly carried out this work from its inception.

The average amount of deposits recorded at each of the stations is slightly higher during the year (21.31 tons being recorded at the Northgate Station in 1933 as compared with 19.10 tons in 1932, and 8.75 tons at the Clarence Park Station as against 8.38 tons the previous year).

During 1933 the lectures in connection with Boiler Efficiency and Smoke Abatement have continued to be given, as in previous years, at the Technical College, by Mr. E. Dickinson, M.I.M.E. It was again only possible to hold one course of lectures, and these were attended by ten students. The usual examinations, consisting of written and oral tests, together with a practical test in a boiler-house, was held on the completion of the course, and out of a total of eight students who entered and sat for the examination six received Certificates of efficiency, which were also endorsed on behalf of the West Riding Regional Smoke Abatement Committee.

MILK SUPPLY.

Registration of Cowkeepers, etc.

Cowkeepers and Milk Purveyors Resident in the City	19
Milk Purveyors Resident in the City	201
Milk Purveyors from Districts outside the City ...	39

(Included in the Registered Milk Purveyors resident in the City are 144 who are registered to sell milk from a shop in sealed bottles only).

4 Cowkeepers were added to the Register during the year.

4 Cowkeepers discontinued business during the year.

60 Milk Purveyors were added to the Register during the year.

35 Milk Purveyors discontinued business during the year.

During 1933 it was necessary to institute legal proceedings against a Dairyman residing outside the City Boundary for failure to Register as a Retail Purveyor of Milk, as required by Article 6 of the Milk and Dairies Order, 1926. A fine of £1 was imposed.

Legal proceedings were also taken against a Dairyman residing outside the City under Section 31 (2) of the Milk and Dairies Order, 1926, for bottling milk other than in registered dairy. The vendor in question was found actually bottling milk in the street. A fine of £1 was imposed in this case.

The following improvements and matters have been dealt with at various Dairies during the year:—

Cleansing	7	Churn exposed to contamination ...	1
New Dairy Provided	2	Ashbin provided ...	1
Dairy Reconstructed ...	1		
Bottles exposed to contamination ...	1		

It has been necessary to require the remedy of the following matters at Cowsheds during the year.

Cleansing	3	Walls resurfaced ...	2
Floor reconstructed ...	2	Accumulation of manure	1
Drainage improved ...	1		

In the case of two cowsheds, additions have been made giving increased accommodation for 15 milch cows.

Bacteriological Examination of Milk.

During the year 43 samples of Milk were taken in the City, and bacteriologically examined at the County Hall Laboratory.

The following tables give a summary of the results of the examinations as regards:—

(a) Bacterial Contents.

Total Bacteria per c.c.	Number of Samples.	Place of Production.	
		Inside City.	Outside City.
Under 5,000	—	—	—
5,000—10,000	—	—	—
10,000—50,000	13	3	10
50,000—100,000	12	4	8
100,000—500,000	12	2	10
500,000—1,000,000	6	2	4
Total	43	11	32.

(b) Presence of Bacillus Coli (in three tubes).

Number of Tubes.	Number of Samples.	Place of Production.	
		Inside City.	Outside City.
Absent ...	22	5	17
No. 1	5	3	2
Nos. 1 and 2 ...	5	1	4
Nos. 1, 2, and 3	11	2	9
Total ...	43	11	32

All the 43 samples of Milk were examined by animal inoculation for tuberculous infection, and 3 samples or 6.97 per cent gave positive result as against 3.33 per cent. in 1932. In each case the milk had been produced at Cowsheds situate outside the City Boundary.

Sediment in Milk.

Parts per 100,000.	Total Samples.	Place of Production.	
		Inside City.	Outside City.
0—1	40	13	27
1—2	3	2	1
Total ...	43	15	28

The above figures show that 90.7 per cent. of the Samples contained less than 1 part per 100,000, and all less than 2 parts per 100,000.

In addition to the above examinations made for sediment in milk, tests were applied at the time of purchasing the samples by means of a special apparatus (" Minit " Tester). The total number of tests made in this connection was 47, and 9 proved unsatisfactory. In the case of the unsatisfactory tests, steps were taken with a view to an improvement being effected, and thorough investigations made as to the methods of production and distribution.

The results of these examinations show that whilst still further improvement is desired in the production and distribution of a clean milk supply, on the whole the steady progress which has taken place in the past 10 years is being maintained.

Quality of Milk.

108 samples of new milk were examined by the City Analyst for quality, and 18 (16.6 per cent.) were reported as not being up to the standard, as against 5 (5.05 per cent.) in 1932, and as compared with 7.3 per cent. for that of England and Wales for 1932.

It will be noticed that the number of samples of New Milk not up to standard in 1933 is somewhat higher than found in the previous year, and is also higher than the figure for the whole country. It should be pointed out, however, that the deficiency in the majority of the cases reported on was only slight, no flgrant case being found. As will be found from the table following under the section dealing with Food Analysis careful attention was given to all the cases adversely reported on by means of the procuring of "follow up samples," and the warning of vendors as to the necessity for improvement in quality. In some cases the milk was produced outside the City, and representations in such instances were made to the Local Authorities having control at the seat of production.

COMPOSITION OF MILK SAMPLES TAKEN DURING 1933.

Month.	Number of Samples.	Average Fat.	Average Non-Fatty Solids.
January ...	3	3.43	9.17
February ...	7	3.20	8.99
March ...	9	3.36	9.18
April ...	6	3.37	8.88
May ...	8	3.73	9.05
June ...	8	3.63	8.91
July ...	4	4.33	9.02
August ...	11	3.47	8.92
September ...	5	3.85	8.99
October ...	12	4.23	8.96
November ...	10	3.45	8.95
December ...	7	3.51	9.03
Total ...	90	3.63	9.00

The Milk (Special Designations) Order, 1923.

Number of Licences in operation during 1933—9.
6 Licences are to retail Grade "A" Milk.
2 Licences are to retail Pasteurised Milk.
1 Licence is to Pasteurise Milk.

All the Milk sold under The Milk (Special Designations) Order is produced outside the City.

Grade "A" (Tuberculin Tested) Milk is supplied to both Municipal Hospitals in the City.

General Remarks on Milk Supply.

The supervision, both as regards methods of production and the handling and distribution of milk, has continued to receive careful attention during the year, and it has been found that the Cowsheds and Dairies situate inside the City have been maintained in a satisfactory condition. In some instances improvements have been carried out, which will undoubtedly give better facilities for milk to be produced and stored under cleaner and more up-to-date lines. It is found that on the whole the various producers of milk in the City are genuinely endeavouring to assist the Health Department in its efforts to secure a clean and pure milk supply for all, and this is borne out by the standard of cleanliness and healthy state of the several herds found on examination. At the same time it is not only the producers whom we are to look to for a satisfactory milk supply, but co-operation is also necessary on the part of retailer or roundsman, and to a certain extent, the householder. Cleanliness in the methods of production and handling is an important aspect in our milk supply, and has no doubt been given serious thought and attention during the past few years, but there is still further need for improvement before the milk supply for general consumption may be looked upon as free from danger to those consuming it.

As pointed out in previous reports, the question of sterilization of vessels used for storage, and other equipment will have to be seriously tackled in the near future, and it is only in this way that we may be able to consolidate the work already accomplished, and at the same time cause further progress to be made.

ANALYSIS OF FOOD AND DRUGS.

(a) Samples Taken.

Name of Article.	Total.	Number of Samples taken for Analysis.		Number found Adulterated.		Percentage Adulterated.	
		Informal.	Formal.	Informal.	Formal.	In-formal.	For-mal.
New Milk (Quality)	108	—	108	—	18	—	16.6
New Milk (Cleanliness)	42	—	42	—	—	—	—
Grade "A" T.T. Milk	1	—	1	—	—	—	—
Grade "A" Milk ...	3	—	3	—	—	—	
Pasteurised Milk (Quality) ...	1	—	1	—	—	—	—
(Cleanliness) ...	1	—	1	—	—	—	—
Sterilized Milk ...	2	—	2	—	—	—	—
Dried Milk ...	3	—	3	—	—	—	—
Condensed Milk ...	1	—	1	—	—	—	—
Ammoniated Tincture of Quinine	1	1	—	—	—	—	—
Arrowroot	1	1	—	—	—	—	—
Butter	1	1	—	—	—	—	—
Boiled Sweets Mixed	2	2	—	—	—	—	—
Baking Powder ...	1	1	—	—	—	—	—
Bi-Carbonate of Soda	1	1	—	—	—	—	—
Beef Suet	1	1	—	—	—	—	—
Cream Ice	1	1	—	—	—	—	—
Cream	6	6	—	—	—	—	—
Cream Tinned ...	1	1	—	—	—	—	—
Cream of Tartar ...	1	1	—	—	—	—	—
Coffee	1	1	—	—	—	—	—
Cake Powder ...	1	1	—	—	—	—	—
Custard Powder ...	1	1	—	—	—	—	—
Castor Oil	1	1	—	—	—	—	—
Camphorated Oil ...	2	2	—	—	—	—	—
Cheese	1	1	—	—	—	—	—
Dripping (Beef) ...	1	1	—	—	—	—	—
Egg Powder (Subs.)	1	1	—	—	—	—	—
Fish Paste	1	1	—	—	—	—	—
Fish Tinned ...	1	1	—	—	—	—	—
Glycerine and Borax ...	1	1	—	1	—	100.00	—

Name of Article.	Total.	Number of Samples taken for Analysis.		Number found Adulterated.		Adulterated. Percentage	
		Informal.	Formal.	Informal.	Formal.	In-formal.	For-mal.
Ground Ginger ...	1	1	—	—	—	—	—
Glauber Salts ...	1	1	—	—	—	—	—
Jam	1	1	—	—	—	—	—
Lysol Pure, B.P.	1	1	—	—	—	—	—
Mixed Dried Fruit	2	2	—	—	—	—	—
Mince Meat ...	1	1	—	—	—	—	—
Mustard	1	1	—	—	—	—	—
Olive Oil	1	1	—	—	—	—	—
Ointment Zinc ...	1	1	—	—	—	—	—
Ointment Boric ...	1	1	—	—	—	—	—
Pepper, White ...	1	1	—	—	—	—	—
Potted Meat ...	2	2	—	—	—	—	—
Polony	1	1	—	—	—	—	—
Paregoric	1	1	—	—	—	—	—
Parrish's Food ...	1	1	—	—	—	—	—
Pills, Blaud's ...	1	1	—	—	—	—	—
Sausage, Pork ...	3	3	—	—	—	—	—
Sausage, Beef ...	2	2	—	—	—	—	—
Sponge Cakes ...	1	1	—	—	—	—	—
Self Raising Flour	1	1	—	—	—	—	—
Sweet Spirits of Nitre	1	1	—	—	—	—	—
Seidlitz Powder ...	1	1	—	—	—	—	—
Sultanas	1	1	—	—	—	—	—
Tea	1	1	—	—	—	—	—
Tinc. of Iodine ...	1	1	—	—	—	—	—
Vinegar	1	1	—	—	—	—	—
Wine, Black Currant	1	1	—	—	—	—	—
Totals ...	223	61	162	1	18	1.64	11.1

(b) Particulars of Adulterated Samples.

No.	Article.	Defects.	Action Taken.
189	New Milk.	0.14 per cent. deficiency Milk Fat	Follow up Sample No. 204 taken and found to be genuine.
195	do.	0.10 per cent. deficiency Milk Fat	Follow up Sample No. 237 taken and found to be genuine.
212	do.	0.16 per cent. do.	Follow up Sample No. 262 taken and found to be genuine.
227	do.	0.18 do. do.	Follow up Sample No. 341 taken and found to be deficient. Vendor warned
236	do.	0.30 do. do.	Follow up Sample No. 246 taken and found to be genuine.
255	do	0.26 do. do.	Follow up Sample No. 260 taken from producer in course of delivery to retailer and found to be genuine. Case referred to County Authority.
272	do.	Found to contain 1.17 per cent. added water.	Follow up Sample No. 274 taken and found to be genuine.
273	do.	Found to contain 4 per cent. added water.	Follow up Sample No. 306 taken and found to be genuine.

No	Article.	Defects.	Action taken.
307	do.	Found to contain 2.6 per cent. added water.	Follow up Sample No. 313 taken and found to be genuine.
309	do.	Found to contain 1.6 per cent. added water.	No. 310 taken and found to be genuine.
317	do.	0.42 per cent. deficiency Milk Fat ...	Follow up Sample No. 327 taken and found to be deficient. Case referred to County Authority.
327	do.	0.40 per cent. deficiency Milk Fat, and 0.90 per cent. added water.	
333	Glycerine and Borax.	Found to contain 65 per cent. of the minimum amount of Borax required	Follow up Sample No. 334 taken and found to be genuine. Town Clerk wrote warning vendor.
336	New Milk.	0.12 per cent. deficiency Milk Fat ...	Follow up Sample No. 359 taken and found to be genuine.
341	do.	0.12 per cent. deficiency Milk Fat ...	Vendor warned.
348	do.	0.24 do. do. ...	Follow up Sample No. 354 taken and found to be genuine.
351	do.	0.14 do. do. ...	Follow up Sample No. 389 taken and found to be deficient. Case referred to County Authority.

No.	Article.	Defects.	Action taken.
352	New Milk.	0.70 per cent. do. ...	Follow up Sample No. 356 taken from producer in course of delivery to retailer and found to be genuine.
360	do.	Found to contain 1.18 per cent. added water.	Follow up Sample No. 390 taken and found to be genuine.

SLAUGHTERHOUSES.

The following table shows particulars of all private slaughterhouses in the City at the end of 1933.

	Number of Slaughterhouses
Registered	8
Licensed	14
Total ...	22

The above figures do not include the Public Slaughterhouse owned by the Corporation.

The observance of the Public Health (Meat) Regulations, 1924, has been satisfactorily carried out by Meat Traders during the year, and it was only necessary to direct attention to the need for improvement in 11 instances. The infringements referred to the following:—

Unsuitable cover to Market Stall	4
Name and address not inscribed on stall ...	4
Hanging Meat outside shop exposed to contamination	3

Number of Animals Slaughtered in the City during 1933.

	Beasts.	Calves.	Pigs.	Sheep.	Total.
Public Slaughter House	2862	212	2780	9263	15,117
Private Slaughterhouses	1735	130	4494	4016	10,375
Total for the Year	4597	342	7274	13,279	25,492

A total of 2,171 more animals were slaughtered in the City during 1933, than in the previous year. The increase was in connection with beasts (229), pigs (171), and sheep (1,842), whilst calves showed a decline. The increase in animals slaughtered was evenly distributed between the Public (1,166) and Private (1,005) Slaughterhouses.

From the above table it will be seen that a total of 25,492 animals were slaughtered in 1933, as against 23,321 in the previous year.

Condemnations of Unsound Food.

1,553	Meat	Weighing 7,018 Stones.
4	Rabbits	85 ,,
1	Fish	6 ,,
15	Tinned Goods ...	602 Tins.
4	Poultry	
1	Vegetable	Weighing 120 Pounds.
1	Confectionery	

Where Condemnations Made.

10 Cold Stores.
15 Shops.
1 Railway Goods Yard.
4 Borough Market.
8 Warehouses.
1,128 Borough Slaughterhouse
512 Private Slaughterhouses.

In 3 instances it was necessary to seize the food by Statutory procedure and to obtain a Magistrate's Order for the condemnation and destruction of same.

Arising out of one of the seizures of unsound food, proceedings were instituted against a vendor for exposing for sale at a stall in the Borough Market 41 rabbits, which were found to be decomposing and unfit for human consumption. The defendant in question was found guilty, and a fine of £10, or 2 months' imprisonment in default, was imposed.

Number of Carcases Condemned.

Condemnations due to Tuberculosis.

Animals.	Whole Carcases.		Part Carcases.	
	Borough Slaughter House.	Private Slaughter House.	Borough Slaughter House.	Private Slaughter House.
Cows ...	*85	3	24	10
Heifers	5	1	—	—
Bullocks	4	1	—	—
Calves ...	1	—	—	—
Pigs ...	10	9	—	1
Total	105	14	24	11

* Including 2 animals slaughtered under the Tuberculosis Order 1925, from premises situate within the City.

Condemnations due to other Defined Disease.

Animals.	Whole Carcases.		Part Carcases.	
	Borough Slaughter House.	Private Slaughter House.	Borough Slaughter House.	Private Slaughter House.
Cows ...	18	—	5	1
Heifers	—	—	—	—
Bullocks	1	—	—	—
Calves ...	5	1	—	—
Pigs ...	4	5	2	2
Sheep ...	25	6	—	—
	53	12	7	3

Condemnations of Offal.

Animals.	Tuberculosis.				Other Conditions.			
	Boro. Sl. House.		Priv. Sl. House.		Boro. Sl. House.		Priv. Sl. House.	
	Condemnations.	Weight Stones.	Condemnations.	Weight Stones.	Condemnations.	Weight Stones.	Condemnations.	Wt. Sts.
Bovines ...	485	992	147	242	283	351	47	53
Sheep ...	—	—	—	—	6	4	3	1
Pigs ...	135	148	141	147	30	28	34	29
Calves ...	—	—	—	—	—	—	—	—
Totals ...	620	1140	288	389	319	383	84	83

	1932.	1933.
Percentage of Condemnations due to Tubercular Disease	70.36	68.38
Percentage of Bovines affected with Tubercular Disease	13.53	16.66
Percentage of Pigs affected with Tubercular Disease	1.71	4.09
Percentage of all animals slaughtered in the City affected with disease ...	5.90	6.04
Percentage of all animals slaughtered in Private Slaughterhouses affected with disease	4.01	3.97
Percentage of all animals slaughtered in Borough Slaughterhouse affected with disease	7.1	7.46

In addition to the above, a total of 70 whole carcases and parts of five carcases, along with edible offal weighing 16 tons 2 cwts., were condemned as unfit for human consumption. These condemnations were made in connection with the slaughter of animals brought into the Public Abattoir by the Chief Veterinary Officer of the West Riding County Council, from districts situate outside the City Boundary.

The total number of animals so dealt with in 1933 was 152. The disposal of meat condemned at the Public and Private Slaughterhouses is carried out by incineration at the Corporation Depot.

REMARKS ON FOOD INSPECTION.

It will be observed from the foregoing tables that a considerable amount of time has continued to be devoted to the inspection of meat and other foods. As already stated elsewhere, the number of animals slaughtered in the City showed an increase during 1933, and some idea may be gathered of the amount of work meat inspection alone entails, when it is pointed out that every animal slaughtered in the City is subject to careful examination. A large amount of time is taken up with the examination of animals slaughtered in private slaughterhouses, and the only way this may be overcome is by the provision of a new public abattoir, built on modern lines. Owing to Wakefield being a centre for the distribution of live stock by reason of the fact that two cattle markets are held weekly, the question of proper facilities for the slaughter of animals is likely to arise in the near future, especially in view of one of the recommendations of the Government Commission on Live Stock Re-organisation to set up a further Commission on Slaughterhouses. The provision of a new municipal slaughterhouse would not only facilitate the work of meat inspection, but it would be advantageous in making available accommodation for modern refrigeration, and the treatment of the various bye-products connected with the slaughter of animals.

The bye-law with regard to the stunning of all animals slaughtered for food in the City by a mechanically operated instrument has continued to be complied with throughout the year, and no complaints have been received of any deleterious effect on the keeping and marketable qualities of the meat, or of the efficiency of the method of slaughter.

The bye-law, however, was superseded at the end of the year by the coming into law of the Slaughter of Animals Act, 1933. Arrangements were completed for the putting into operation of the new Act on the 1st January, 1934, and it was found that no difficulties are likely to be encountered in carrying out its principal provisions. The City Council decided that all animals including sheep, should be slaughtered by a mechanically operated instrument.

The handling and distribution of food has also called for increased attention, particularly in regard to contamination of meat by dust and dirt. The question of shop windows where food is exposed and distributed, has been receiving attention on the part of tradesmen concerned, and it is pleasing to find an increase in the number of closed windows than that which appertained a few years ago. There are, however, still a few tradesmen, mostly butchers, who still adhere to the open window, and it is to be hoped that before long they will follow the trend of modern standards.

It is also satisfactory to note an increase in the number of cold rooms and refrigerating plants at present being installed in butchers' and other shops where food is prepared and distributed. The benefits to be derived, both to the tradesman and consumer, from this form of accommodation is of far reaching importance, and it is to be hoped will be considerably extended in the future.

RAG FLOCK ACTS, 1911 and 1928.

During the year 2 samples of Rag Flocks were obtained and submitted for analysis under the Rag Flock Acts.

The City Analyst reported that both of the samples were satisfactory. The samples were obtained at premises where the manufacture of upholstery is carried on, the material being used in connection with same. No manufacture of Rag Flocks is carried on in the City.

OFFENSIVE TRADES.

Offensive Trades on the Register at the end of 1933.

Trade.	Number.
Tripe Boiling	5
Gut Scraping	1
Rag and Bone Dealing	4
Fish Frying	68
Total	78

Offensive Trades taken off Register during 1933	4
Offensive Trades put on Register during 1933	3

All the Offensive Trade premises have been kept under regular supervision throughout the year, and it is found that the various businesses were being conducted in a satisfactory manner.

Certain matters of a minor character were found to require attention, and were satisfactorily dealt with as follows:—

Cleansing	9
Accumulations	4
Drainage	3

During the year 3 new fish frying premises were put on the Register, and in two instances the business was discontinued.

Improvements have been effected at seven of the older type of buildings used for the business of fish frying. In each case the improvements carried out have brought the premises more into line with modern hygienic requirements.

ANNUAL REPORT on the Administration of the Factory and Workshops Act, 1901, in connection with:—

FACTORIES, WORKSHOPS, AND WORKPLACES.

1. Inspection of Factories, Workshops, and Workplaces.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises.	Number of		
	Inspections.	Written Notices.	Occupiers Prosecuted.
Factories (including Factory Laundries) ...	17	5	—
Workshops (including Workshop Laundries) ...	204	8	—
Workplaces (other than Outworkers' premises)	41	—	—
Total	252	13	—

2.—Defects found in Factories, Workshops, and Workplaces.

Particulars.	Number of Defects		Referred to H.M. Inspector.	Number of Offences in respect to which Prosecutions were instituted.
	Found.	Remedied.		
Nuisances under the Public Health Acts: —				
Want of Cleanliness	15	15		
Drains Repaired	2	2		
Want of Ventilation	—	—		
Walls	—	—		
Overcrowded	—	—		
Floors	1	1		
Other Nuisances	10	10		
Sanitary Accommodation. Insufficient	8	8		
Sanitary Accommodation. Unsuitable or defective ...	6	6		
Sanitary Accommodation. Not separate for sexes ...	3	3		
Total	45	45		

OUTWORK IN UNWHOLESOME PREMISES.
SECTION 108.

Nil.

REGISTERED WORKSHOPS.

Workshops on the Register (S. 131) at end of year.	Number.
Bakehouses (Factory)	10
Bakehouses (Workshops)	46
Dressmaking	9
Saddlery	3
Boot Repairing	13
Millinery	2
Upholstery	6
Tailoring	7
Joinery	9
Other Workshops	49
Total	154

During the year 6 Notices were received from H.M. Inspector of Factories regarding the following:—

Defects.	Found.	Remedied.
Insufficient Closet Accommodation	5	5
Insufficient Ventilation	8	8
Water Closet	1	1
Urinal	1	1

HOUSING.

(a) Statistics.

Number of New Houses erected during 1933.

Size of House according to number of Habitable Rooms.	Total.	Built by Corporation..	Built by Private Enterprise.
3 roomed	—	—	—
4 ,, ...	128	105	23
5 ,, ...	63	—	63
6 ,, ...	24	—	24
7 roomed and over ...	3	—	3
Total	218	105	113

The number of New Houses erected in each of the Wards is as follows:—

Alverthorpe ...	58	South Westgate ...	13
Eastmoor (Municipal) ...	89	Primrose Hill ...	5
North Westgate (Municipal) ...	11	St. John's ...	4
Northgate ...	12	Calder	10
		Belle Vue ...	3
		Sandal	13

1.—Inspection of Dwelling Houses during the Year.

(1) (*a*) Total number of Dwelling Houses inspected for housing defects (under Public Health or Housing Acts) ... 550

(*b*) Number of Inspections made for the purpose 1,513

(2) (*a*) Number of Dwelling Houses included in Sub Head (1) above, which were inspected and recorded under the Housing Consolidated Regulations, 1925. (In addition 1,105 houses were surveyed under the Clearance Area 5 years' scheme) 168

(*b*) Number of Inspections made for the purpose 538

(3) Number of Dwelling Houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation 48

(4) Number of Dwelling Houses (exclusive of those referred to under the preceding Sub Head) found not to be in all respects reasonably fit for human habitation 106

2.—Remedy of Defects during the Year without Service of Formal Notice.

Number of defective Dwelling Houses rendered fit in consequence of informal action by the Local Authority or their Officers 425

3.—Action under Statutory Powers during the Year.

A.—Proceedings under Sections 17, 18 and 23 of the Housing Act, 1930:—

(1) Number of Dwelling Houses in respect of which Notices were served requiring repairs 12

(2) Number of Dwelling Houses which were rendered fit after service of Formal Notice.

(*a*) By Owners 12

(*b*) By Local Authority in default of Owners ... ... —

B.—Proceedings under Public Health Acts.

(1) Number of Dwelling Houses in respect of which Notices were served requiring defects to be remedied 25

(2)	Number of Dwelling Houses in which defects were remedied after service of Formal Notice.	
	(*a*) By Owners	25
	(*b*) by Local Authority in default of Owners	—

C.—Proceedings under Sections 19 and 21 of the Housing Act, 1930:—

(1)	Number of Dwelling Houses in respect of which Demolition Orders were made	48
(2)	Number of Dwelling Houses demolished in pursuance of Demolition Orders	19

(In addition to the above 24 houses were represented as unfit for human habitation, and undertakings were entered into between the Council and Owners of the respective properties, under Section 19 (2) that the Dwelling Houses should not be used for human habitation).

D.—Proceedings under Section 20 of the Housing Act, 1930:—

(1)	Number of Separate Tenements or Underground Rooms in respect of which Closing Orders were made ...	—
(2)	Number of Separate Tenements or Underground Rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	—

Remarks on Housing.

In consequence of the Ministry of Health issuing a Circular No. 1331 on the 6th April, 1933, asking the Local Authorities to submit a programme of insanitary houses requiring clearance before 1938, the inspection staff were busily engaged on the work during the greater part of the year. The obtaining of the necessary information for the return entailed the inspection and survey of some 1,105 houses. It might be pointed out that a more detailed inspection is being carried out by the District Sanitary

Inspectors, which will take some time yet to complete and possibly some revision of the details will be necessary to be made of the return sent to the Ministry when the full survey has been completed. The return required by the Ministry was completed in August, and included 121 Clearance Areas containing 743 houses; 74 houses for action by Individual Demolition; and 1 Improvement Area with a total of 337 houses.

In connection with clearance of unfit houses preparations had been made at the end of the year for the representation of 212 houses having a population of 761 persons, and were included in the 5 years' programme. The houses are made up of six clearance areas.

The 168 houses inspected under the Housing Consolidated Regulations, 1925 included 72 unfit houses, and were dealt with by procedure under Section 19 of the Housing Act, 1930, 48 houses being subject to Demolition Orders, and in the case of the remaining 24 houses undertakings were accepted from the owners that they should not be used for human habitation.

During the year 19 houses were demolished under Section 19 of the Housing Act, 1930, all the properties were in connection with representation and Orders made in 1933, and the persons displaced were 59.

The demolition of houses in connection with the New Street Compulsory Purchase and Clearance Orders were completed during the year. The number of houses in this scheme was 89.

Re-Housing.

The 88 houses erected to provide re-housing accommodation for displaced tenants in the New Street Clearance Scheme were fully occupied during the year, the remainder of the 88 houses were completed and ready for occupation at the early part of the year. The completion of these houses gave further accommodation for 30 families, the other 58 houses having been occupied since 1932. Of the 88 houses erected for re-housing at the Darnley Estate tenancies were entered into by 70 families (58 in 1932 and 12 in 1933) from the New Street Area, since that time, however, 7 of the families have given up the tenancies, and at the end of the year 63 houses were occupied by displacements from New Street. The 25 surplus houses were occupied by 19 families from houses subject to Individual Demolition Orders, and in 6 cases from houses in which undertakings had been accepted by the Corporation not to use the houses for human habitation. During the year instructions were given for the erection of a further 80 houses at the Darnley Estate for re-housing displaced tenants from insanitary houses, but none of these were completed at the end of 1933.

The transference of the tenants to re-housing houses has continued under the control of the Health Department, and also the general supervision of the houses in regard to cleanliness. It has been found that on the whole a reasonable standard of cleanliness is being maintained, indeed in a large number of cases the response to the new environment has been encouraging.

Verminous Houses.

The Health Department has had to give much time and attention to the question of the noxious insect pest, the Bed Bug, which is no doubt an important item of the insanitary house problem. Owing to the prevalence of vermin having so enormously increased it has meant a considerable amount of time having to be spent in connection with the re-housing of families dealt with in properties subject to demolition. The transitional houses in New Street, set up for the purpose of treating families and house contents severely infested with vermin, have proved of considerable assistance in disinfesting the families and household furniture before being allowed to take up residence in a re-housing house.

The problem of the verminous house is increasing in intensity, and will continue to do so until the bulk of the insanitary houses in the City have been removed. In order to combat the menace it will be necessary for additional facilities to be available, either in the way of more transitional houses or the adoption of a more expeditious method of gaseous disinfestation.

At the same time many of the people occupying verminous houses exercise an indifferent attitude towards the question. It should be pointed out that the co-operation of the householder has an important bearing on the success of the work of disinfestation, and it is in this direction we have to look for assistance in our efforts for complete eradication of the pest. Another matter in which a lot of ignorance is displayed in connection with vermin infestation is the acquiring of second-hand furniture. The dissemination of vermin by second-hand furniture is increasing to such an extent that it is a pity more powers of control are not available. The work of disinfestation is one of the most difficult problems the Health Department is having to encounter at the present time, and no effort should be spared in trying to combat this detestable feature of life found in the majority of unhealthy houses.

Housing Needs.

I should like to draw attention to the need which exists in the City for the provision of a type of housing accommodation in connection with those families who are not favourably looked upon as suitable tenants for the modern municipal house. The type of family referred to is that which has to resort to the Houses Let in Lodgings, or better known as sub-let rooms. In many cases the family is unable, owing to pecuniary and other circumstances, to obtain and fulfill the obligations of properly managing a house for their sole occupation. It is found in many cases the families have never had a house to themselves, and express the desire not to be provided with one. Owing to the rowdy disposition, low standard of cleanliness, and unsatisfactory habits, the type of accommodation needed for this class of person is on communal lines fitted up for abnormal wear and tear and constructed so as to be proof against vermin.

WILLIAM ROBERTS.

PREVALENCE OF, AND CONTROL OVER, INFECTIOUS DISEASES.

Notification of Infectious Diseases, 1933.

DISEASE.	Number of Cases Notified.														Number of Deaths.												
	At all Ages.	0—1 yr.	1—2 yrs.	2—3 yrs.	3—4 yrs.	4—5 yrs.	5—10 yrs.	10—15 yrs.	15—20 yrs.	20—35 yrs.	35—45 yrs.	45—65 yrs.	65 and over.	Treated in Hospital.	At all Ages.	0—1 yr.	1—2 yrs.	2—3 yrs.	3—4 yrs.	4—5 yrs.	5—10 yrs.	10—15 yrs.	15—20 yrs.	20—35 yrs.	35—45 yrs.	45—65 yrs.	65 and over.
mallpox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
olera	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
lague	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
iphtheria (including Membraneous Croup)	190	—	2	8	7	15	87	47	8	12	3	1	—	†184	19	—	—	2	1	—	14	2	—	—	—	—	—
rysipelas	27	—	—	—	—	—	1	1	1	3	3	14	4	7	3	—	—	—	—	—	—	—	—	—	—	2	1
carlet Fever	318	—	3	7	15	26	138	78	19	28	1	3	—	†202	8	—	1	2	—	1	4	—	—	—	—	—	—
yphus Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
nteric Fever	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
elapsing Fever ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ontinued Fever ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ucrperal Fever ...	4	—	—	—	—	—	—	—	—	4	—	—	—	4	1	—	—	—	—	—	—	—	—	—	1	—	—
uerperal Pyrexia ...	11	—	—	—	—	—	—	—	1	9	1	—	—	10	—	—	—	—	—	—	—	—	—	—	—	—	—
erebrospinal Meningitis	2	—	—	—	1	—	—	—	1	—	—	—	—	2	1	—	—	—	1	—	—	—	—	—	—	—	—
oliomyelitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
phthalmia Neonatorum	2	2	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—
rimary Pneumonia ...	88	1	4	4	5	6	13	8	2	14	12	10	9	48	51	7	4	5	2	—	3	1	—	4	6	9	10
nfluenzal Pneumonia ...	20	1	3	—	2	3	1	2	—	1	2	3	2	4	9	1	1	—	—	1	—	—	—	—	2	2	2
ysentery	3	—	—	—	—	—	—	—	—	—	—	2	1	3	*2	—	—	—	—	—	—	—	—	—	—	1	1
ulmonary Tuberculosis	47	—	—	1	1	—	—	2	4	21	8	10	0	—	30	—	—	—	—	—	—	—	1	13	6	10	—
on-Pulmonary Tuberculosis	19	—	2	1	—	—	2	4	3	4	2	1	—	—	7	—	1	1	1	1	—	—	1	1	1	—	—
easles	342	38	54	59	89	102	—	—	—	—	—	—	—	—	4	1	2	1	—	—	—	—	—	—	—	—	—
hooping Cough ...	31	4	5	8	5	9	—	—	—	—	—	—	—	—	4	—	1	1	2	—	—	—	—	—	—	—	—
cute Polioencephalitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
cute Encephalitis Lethargica	1	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—	—	—	—	—	—	—	1	—
ood Poisoning	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
emphigus Neonatorum	3	3	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—
	1109	49	73	88	125	161	243	142	39	96	32	45	16	467	140	9	10	12	7	3	21	3	2	18	16	25	14

† These figures include 1 Scarlet Fever and 1 Diphtheria, which, in the Fever Hospital Section, are counted as " observation cases."

* Non-Residents.

Diphtheria.

190 cases of Diphtheria were notified (94 males and 96 females), giving an attack rate of 3.15, as compared with 6.99 in 1932 and 1.64 the average for the ten years 1923-32.

The cases occurred in the Wards as follows:—

North Westgate	32	Sandal ...	18	Calder ...	1
Eastmoor ...	30	South Westgate	14	Clayton Hospital	1
Primrose Hill	26	Kirkgate ...	13	Public Assistance Institution ...	1
Belle Vue ...	23	St. John's ...	10	Fever Hospital	1
Northgate ...	18	Alverthorpe ...	2		

The number of cases notified monthly were as follows:—

January	18	1st Quarter 55	July	15	3rd Quarter 44
February	20		August	17	
March	17		September	12	
April	17	2nd Quarter 47	October	8	4th Quarter 44
May	20		November	8	
June	10		December	28	

The number of cases in the various age periods were as follows:—

Under 1 year ...	—	10—15 years ...	47
1—2 years	2	15—20 „ ...	8
2—3 „	8	20—35 „ ...	12
3—4 „	7	35—45 „ ...	3
4—5 „	15	45—65 „ ...	1
5—10 „	87	65 years and over ...	—

184 cases (97 per cent.) were removed to Hospital (183 to the City Fever Hospital and 1 to Brighouse Hospital). Five cases were isolated at home, and one died on the day of notification, before removal could be effected.

There were 19 deaths (9 males and 10 females) giving a case mortality of 10 per cent. and a death rate of 0.33 per 1,000 of the population, as compared with 0.51 in 1932, and 0.13 the average for the ten years 1923-32. The corresponding rate in England and Wales in 1933 was 0.66, and in the large towns 0.08.

The deaths occurred in the following age groups:—

Under 1 year ...	—	4—5 years	—
1—2 years	—	5—10 „	14
2—3 „	2	10—15 „	2
3—4 „	1		

Diphtheria and Home Conditions.

Of the 149 ordinary dwellings affected, 13 had less than one person per room, 114 had from one to two persons per room, and 22 had more than two persons per room. 15 per cent. of the houses were overcrowded according to the standard of the Registrar-General.

Home Contacts	Under 14 years of age—248 (Susceptibles—234). Over 14 years of age—451 (Susceptibles—435).

Amongst the 234 susceptible contacts under 14 years of age, there occurred 3 return cases and 6 secondary cases. Amongst the 435 susceptible contacts over 14 years of age, there occurred 4 return cases and 2 secondary cases.

Houses with Secondary Cases	Under 1 person per room	—
	1 and up to 2 persons per room ...	5
	More than 2 persons per room ...	3
Houses with Return Cases	Under 1 person per room	—
	1 and up to 2 persons per room ...	5
	More than 2 persons per room ...	1

Scarlet Fever.

318 cases of Scarlet Fever were notified (149 males and 169 females), giving an attack rate of 5.28 per 1,000, as compared with 6.45 in 1932, and 3.06 the average for the ten years 1923-32. There were 67 less cases than in 1932.

The cases occurred in the Wards as follows:—

North Westgate ...	78	Sandal ...	24	Northgate ...	13
Belle Vue ...	69	Kirkgate ...	23	South Westgate ...	4
Primrose Hill	26	St. John's ...	20	Clayton Hospital ...	1
Alverthorpe ...	24	Eastmoor ...	20		
		Calder ...	16		

The number of cases notified monthly were as follows:—

January	25	1st Quarter 80	April	28	2nd Quarter 94
February	28		May	35	
March	27		June	31	
July	22	3rd Quarter 66	October	29	4th Quarter 78
August	20		November	25	
September	24		December	24	

The number of cases in the various age periods were as follows:—

Under 1 year ...	—	Under 5 years—51	5—10 years ...	138
1—2 years ...	3		10—15 ,, ...	78
2—3 ,, ...	7		15—20 ,, ...	19
3—4 ,, ...	15		20—35 ,, ...	28
4—5 ,, ...	26		35—45 ,, ...	1
			45—65 ,, ...	3

202 cases (60 per cent.) were removed to Hospital and 116 were isolated at home. There were 8 deaths, giving a case mortality of 2.52 per cent., as compared with 1.30 in 1932, and a death rate of 0.14 per 1,000 of the population, as compared with 0.09 in 1932, and 0.03 the average for the ten years 1923-32. The corresponding rate in England and Wales in 1933 was 0.02, and in the large towns 0.02.

There were 16 return cases (5.0 per cent.), 14 relating to 11 hospital cases (5.6 per cent. of discharges) discharged from hospital, and 2 relating to 2 home isolation cases. There were also 31 secondary cases.

Scarlet Fever and Home Conditions.

Of the 353 ordinary dwellings affected, 63 had less than one person per room, 167 had between one and two persons per room, and 23 had more than two persons per room. 6.5 per cent of the houses were overcrowded according to the standard of the Registrar-General, as compared with 12 per cent. in 1932.

Home Contacts	Under 14 years of age—314 (Susceptibles—292). Over 14 years of age—685 (Susceptibles—618).

Amongst the 292 susceptible contacts under 14 years of age, there occured 12 return cases and 19 secondary cases. Amongst the 618 susceptible contacts over 14 years of age, there occurred 4 return cases and 12 secondary cases.

		Cases.
Houses with Secondary Cases	Under 1 person per room ...	6
	1 and up to 2 persons per room	14
	More than 2 persons per room ...	5
Houses with Return Cases	Under 1 person per room ...	1
	1 and up to 2 persons per room	11
	More than 2 persons per room ...	1

Enteric Fever.

One case of Enteric Fever was notified, giving an attack rate of 0.02 per 1,000 of the population, as compared with 0.07 in 1932, and 0.13 the average for the ten years 1923-32. The patient, a child aged 8 years, was notified in March, and was treated at home. Bacteriological examination showed the presence of B. Typhosus and B. Paratyphosus B. The patient recovered from the attack.

Pneumonia.

108 cases of Pneumonia were notified (88 Primary and 20 Influenzal), 55 in the first quarter of the year, 21 in the second quarter, 12 in the third quarter, and 20 in the fourth quarter. Of the notified cases, 25 died. There were 34 deaths from Pneumonia where the illness had not been notified.

Dysentery.

There were 3 cases of Dysentery notified, all patients in the West Riding Mental Hospital. There were two deaths.

Measles.

342 cases of Measles (all children under 5 years, and all first cases in the household) were notified, as compared with 21 in 1932, and 366 in 1931. 21 cases were notified in the first quarter of the year, 239 in the second, 72 in the third, and 10 in the fourth quarter. In addition, 23 children under five years of age, and 96 over five years of age, were notified through the schools, and 234 cases (including second cases and children over five years of age) were ascertained otherwise. There were 4 deaths from Measles, giving a death rate of 0.07 per 1,000, as compared with 0.05 in 1932, and 0.13 the average for the ten years 1923-32. The immediate causes of death were:—Bronchopneumonia 2, Lobar Pneumonia 1, and Measles 1.

Whooping Cough.

31 cases of Whooping Cough were notified (all children under five years of age, and all first cases in the household), as compared with 79 in 1932. 13 cases were notified in the first quarter of the year, 5 in the second, 11 in the third, and 2 in the fourth quarter. In addition, 31 cases were notified through the schools, and 25 were ascertained otherwise. There were 4 deaths from Whooping Cough (1 aged one year, 1 aged two years, and 2 aged three years), giving a death rate of 0.07 per 1,000, as compared with 0.07 in 1932 and 0.09 the average for the ten years 1923-32. The immediate causes of death were:—Pneumonia 3 and Influenza 1.

Pemphigus Neonatorum.

3 cases of this disease were notified during 1933, as compared with 6 in the previous year.

Cerebro-Spinal Fever.

2 cases of Cerebro-spinal Fever were notified in 1933, the particulars of the cases being as follows:—

Date notified.	Sex.	Age.	Home Address.	**Where** treated.	Whether **confirmed** Bacteriologically.	Result.
31/3/33 ...	F.	15	Irwin Crescent	County Hospital	Yes ...	Recovered
— ...	F.	3	Radcliffe Road	Clayton Hospital	Yes ...	Died 7/8/33

INFECTIOUS DISEASES HOSPITAL.

Statistics, 1933.

DISEASE.	No. of cases in hospital at beginning of year.	No. of cases admitted.	No. of cases under treatment.	No. of cases discharged.	No. of deaths.	Mortality Percentage.	No. of cases remaining at end of year.
Scarlet Fever	22	201	223	196	5	2.5	22
Diphtheria	32	182	214	169	18	10.5	27
Diphtheria Carriers	—	2	2	1	—	—	1
For Observation	—	2	2	2	—	—	—
Totals	54	387	441	368	23	6.13	50

The 6 deaths from Scarlet Fever recorded elsewhere, include one case who died 31/12/1932.

The number of admissions was 203 less than in 1932, and 40 more than in 1931. The largest number of patients in Hospital on one day was 54 (January 1st), and the smallest 19 (July 10th), while the average throughout the year was 37.

Although the Hosital remained in an overcrowded condition throughout most of the year, we were only forced to send one patient to an outside Hospital. This was a case of Diphtheria sent to Brighouse at the beginning of the year. I should like again to express my appreciation of the devoted services of the Matron and the Staff, who have had but little respite during the the preceding two years.

Scarlet Fever.

The maximum daily number of patients was 31 (May), the minimum 9 (August), and the average 21. The maximum period of stay (excluding fatal cases) was 138 days, the minimum 12 days, and the average 40 days. Two patients were admitted on the first day of disease, 66 on the 2nd, 74 on the 3rd, 30 on the 4th, 14 on the 5th, 5 on the 6th, none on the 7th and 8th, 2 on the 9th, none on the 10th, 2 on the 11th, 1 on the 12th, 1 on the 14th, 2 on the 17th, 1 on the 19th, and 1 on the 20th. In no case was the diagnosis revised. Complications occurred as follows:—

	On Admission.	After Admission.
Rhinitis	16 (8%)	22 (11%)
Otorrhoea	5 (2.5%)	26 (13%)
Adenitis	23 (11.5%)	30 (15%)
Tonsillitis	6 (3%)	7 (3.5%)
Diphtheria	5 (2.5%)	1 (0.5%)
Rheumatism	—	10 (5%)
Acute Nephritis	—	16 (8%)

Although the mortality was less than in 1932, there was a high proportion of septic cases (67 per cent.), and all the fatalities were of that type, including one death from septic meningitis. The continued state of overcrowding of the Wards had, in all probability, a good deal to do with this abnormal prevalence of septic complications. There were fewer cases complicated with Diphtheria than in 1932, but one patient required tracheotomy, and recovered. We however continued the practice of protecting all Scarlet Fever patients by an injection of Diphtheria antitoxin immediately on admission. We were much troubled at one period by an outbreak of Chickenpox, which affected 18 Scarlet Fever patients.

Diphtheria.

The maximum daily number of cases was 32 (January), the minimum 4 (July), and the average 16. Excluding fatal cases, the maximum period of stay was 107 days, the minimum 17 days, and the average 38 days. Three cases were admitted on the 1st day of disease, 26 on the 2nd, 60 on the 3rd, 29 on the 4th, 29 on the 5th, 10 on the 6th, 4 on the 7th, 3 on the 8th, 1 on the 9th, 2 on the 10th, 1 on the 11th, 1 on the 13th, and 1 on the 16th day of disease.

In 17 cases, the diagnosis of Diphtheria was revised, and the figures which follow refer only to confirmed cases.

Complications occurred as follows:—

	On Admission.	After Admission.
Rhinitis	20 (11.7%)	2 (1.17%)
Otorrhoea	1 (0.58%)	4 (2.35%)
Adenitis	65 (38.2%)	2 (1.17%)
Albuminuria	24 (14.1%)	3 (1.76%)
Paralysis	2 (1.17%)	36 (21.17%)
Heart complications	—	8 (4.7%)

The total amount of anti-toxin administered was 3,896,000 units, the maximum dose being 60,000 units, and the average 22,000 units. Two patients had Tracheotomy performed on admission, with one recovery and one death. There were 18 deaths, giving a case mortality of 10 per cent. Fourteen died from Toxæmia (including 8 hæmorrhagic cases), two from Heart Block, one from Cardiac Paralysis, and one from Laryngeal Diphtheria (Tracheotomy).

The type of disease continued severe, and the case mortality was about the same as in 1932. 44 per cent. of the cases showed some complication or other. Most of the fatal cases showed severe toxæmia on admission, and about half of them were of the hæmorrhagic type. Although we had rather a higher percentage of paralysis cases than in 1932, more of them recovered, but in many cases, after a long, painful and hazardous illness. It may be said that the anti-toxin treatment continued to give better results than we experienced in 1931, and the toxic cases appeared often to benefit by the glucose-insulin treatment.

The following table gives the results (recoveries and deaths) according to the day of illness on which the patients were admitted:—

Relation of Deaths and Recoveries to the Duration of Illness prior to Admission to Hospital.

	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	13th	16th
Admitted ...	3	26	60	29	29	10	4	3	1	2	1	1	1
Recovered	3	26	53	25	25	7	4	3	1	2	1	1	1
Died ...	—	—	7	4	4	3	—	—	—	—	—	—	—
Mortality per cent. ...	—	—	11.6	13.8	13.8	30.0	—	—	—	—	—	—	—

Remarks on Infectious Diseases.

Diphtheria, Scarlet Fever, and Measles were the most prevalent infectious diseases during 1933. The extensive and severe epidemic of Diphtheria, which commenced in 1931, apparently reached its height in 1932, for the figures for 1933 show a substantial decline. At the same time, the prevalence still remained abnormally high, the rate of attack being about four times as high as it was during the ten years prior to the commencement of the epidemic. The prevalence continued throughout the year, though it was comparatively low in June, and again in October and November, but this was counterbalanced in December, when the highest monthly number of the year was reached. The cases were distributed all over the City, but the fewest cases occurred in Alverthorpe and Calder Wards, and it is noteworthy that these two Wards have had the lowest incidence of the disease throughout the epidemics. As usual, the greatest incidence was amongst children between 5 and 10 years (46 per cent.), and next amongst children between 10 and 15 years (25 per cent.). About 17 per cent. were children under five years, and 12 per cent. persons over fifteen years. 74 per cent. of the cases were school children, but there was no marked incidence in any individual school. Amongst the schools affected, the average number of cases was 4, and the highest 10, whilst five schools had no cases.

All the patients except six were removed to hospital, and, as stated above, we were able, with one exception, to accommodate them in our own Hospital. The doctors, as usual, did all they could to ensure early notification, and as this was invariably done by telephone, we were enabled to remove the patient immediately, even if the case was notified, as a good many were, during the night. When undue delay occurred, it was generally due to delay in seeking medical advice. Sometimes, too, it was felt that the practice of waiting for a bacteriological report was not in the best interests of the patients, although, admittedly, it is often difficult to decide on the diagnosis without such a report. My advice to medical practitioners has always been this: — " If you think from the clinical condition that the disease is probably Diphtheria, get it into hospital at once, without waiting for a bacteriological report. If you think that the disease is probably not Diphtheria, but there is just an element of doubt, then take a swab and await the report." If, by following this practice, a case admitted to hospital proves not to be Diphtheria, no harm will result, as the anti-toxin administered to all patients on admission will protect the patient during the short period he will remain in hospital. The public should appreciate that a revision of diagnosis in such cases involves no reflection on the doctor, but on the contrary, is evidence of his desire to do the best thing for his patient.

As noted above, there was no diminution in the case mortality, although there was a reduction in the number of deaths, following the reduction in the number of cases. The type of disease continued to be severe, due in all probability to the type of Diptheria bacillus—the Bacillus Gravis—which has persisted throughout the epidemic, and which has been found in other severe epidemics throughout the country, since it was demonstrated in the Bacteriological Department of the Leeds Medical School in 1931. All the deaths took place in the Fever Hospital, except one, which died at home on the day of notification.

With regard to Scarlet Fever, we find that the epidemic which started along with Diphtheria in 1931, increased during 1932, and abated somewhat in 1933, but still remained at a high level. There were 63 fewer cases than in 1932, but 55 more than in 1931. The attack rate was about double that of the ten years preceding the epidemic. The disease prevailed very much at the same level throughout the year, though it was highest in the second quarter, and lowest in the third quarter. Cases occurred all over the City, but were most numerous in North Westgate and Belle Vue Wards, and fewest in South Westgate Ward. The age distribution followed that of Diphtheria very closely. The highest incidence was between the ages of 5 and 10 years (43 per cent.), and next between 10 and 15 years (25 per cent.). 16 per cent. were under the age of five years, and 16 per cent. over the age of 15 years. 71 per cent. were school children, and the incidence in the schools affected averaged 6, although eight schools had between 11 and 21 cases each, spread over the year. Only one school escaped altogether. In order to utilise our limited hospital accommodation to the best advantage, it was necessary to isolate 40 per cent. of the cases at home. The proportion of cases isolated at home was much higher than has occurred for some years, although during 1931 and 1932 we have also isolated at home much above the usual number. So far as the dissemination of the disease is concerned, there is little to be gained by hospital isolation, provided reasonable isolation accommodation and attention can be provided in the home. During the last three years, when we have removed 675 cases of Scarlet Fever to Hospital and treated 291 cases at home, I find that the percentage of return cases and secondary cases combined amounts to about the same in both groups. The hospital group has more return cases and fewer secondary cases, while the home group has fewer return cases and more secondary cases, but the total is 14.9 per cent. in the former group and 14.5 per cent. in the latter group. The chief drawback of home isolation is that it often interferes seriously with school attendance, and, of course, it imposes various restrictions on the freedom of the household. The home treated child has, however, the advantage of being saved from other infections which are apt to occur in hospital wards, and probably also is less likely to develop septic complications than children treated in overcrowded wards. At the same time, we can hardly expect under ordinary conditions to isolate satisfactorily at home more than 25 per cent. of the cases notified.

The death rate from Scarlet Fever was high. Of the 8 deaths, 6 occurred in Hospital and 2 at home. Of the two latter, one was that of a child too ill to be removed to Hospital, and who died on the day after notification, and the other was a child who developed Meningitis about six weeks after the onset of Scarlet Fever.

We had our biennial epidemic of Measles in 1933, most of the cases occurring during the second quarter of the year. Altogether, we got information of about 700 cases, but there were only 4 deaths. There was a moderate prevalence of Whooping Cough—some 87 cases being notified or ascertained, but the number of deaths was the same as from Measles.

There was an increase of 25 in the number of Pneumonia cases notified. Out of 108 cases notified, 25 died, but in addition there were 34 deaths where the illness had not been notified. Obviously, the notification of Pneumonia continues very incomplete.

There were only two sporadic cases of Cerebro-spinal Meningitis notified, compared with 17 in 1932. One occurred in March, and the other, a fatal case, in August.

There was only one case of Enteric Fever, and the patient recovered.

There were two cases of Ophthalmia Neonatorum, and both recovered without any damage to the sight.

There was one case of Encephalitis Lethargica notified, and one death, but the death was that of another patient.

There were no cases of Smallpox or Acute Anterior Poliomyelitis notified. With regard to Acute Anterior Poliomyelitis, the few notifications received since the disease became notifiable in 1912—only five cases have been notified during the 21 years, and two of these were notified in 1912—would seem to indicate that the disease is comparatively rare in Wakefield. Although there is no reason to suppose that the disease is at all common, it is in fact not so rare as the notifications would indicate. Every year, one or two children with crippling defects, due to infantile paralysis—the result of acute anterior poliomyelitis—are found at the medical inspection of entrants to the schools. Since 1919, some 30 children with definite infantile paralysis have been so discovered, as well as a number of other children with forms of paralysis which might possibly be due to acute anterior poliomyelitis.

ACTIVE IMMUNISATION AGAINST DIPHTHERIA.

By Dr. Frank Allardice, Deputy Medical Officer of Health.

The Clinic for Active Immunisation against Diphtheria was continued at the Principal Child Welfare Centre, Margaret Street, during the year. For the most part, treatment was carried out on Friday afternoons, but, in addition, it was necessary to institute a session on Wednesday afternoons during part of the year, because of the long waiting list. Even with this provision, there remained somewhere in the region of 330 children awaiting immunisation at the end of the year.

The total number of persons who attended the Immunisation Clinic during the year was 1,095, 991 attending for the first time, and 104 for Schick-testing following the completion of treatment during 1932. The number of attendances registered was 3,463.

The number of completed treatments was 869, and there were 56 persons in process of immunisation at the end of the year. A total number of 66 persons failed to complete the treatment, 56 of these for unknown reasons and 10 for the following reasons:—

(1) Illness—4 cases.
(2) Infectious Diseases (Scarlet Fever)—2 cases.
(3) History of Serum Therapy for prevention of Tetanus—1 case.
(4) History of Serum Therapy for prevention of Cerebro-Spinal Fever—1 case.
(5) Said to have been immunised elsewhere—2 cases.

The 991 persons attending the Immunisation Clinic for the first time were divisible into the following groups:—

(1)	Under 5 years	234
(2)	Between 5 years and 14 years ...	701
(3)	Over 14 years	56
	Total	991

The number of preliminary Schick Tests was 754. There were 505 positive reactors and 234 negative reactors; 15 of the persons tested failed to attend the following week for ascertainment of the type of reaction. The percentage of positive readings was 68.3, and of negative readings 31.7. The corresponding figures for 1932 were 60.9% and 39.1%. The higher gross percentage of positive reactions for 1933 was probably partly accounted for by the fact that 99 persons out of a total of 552 tested in 1932 were over 14 years of age, and only contained 40.4% of positive reactors, whereas in 1933 only 56 out of the total number tested (754) were over 14 years of age.

The following details are of interest in connection with the results of the Schick Test:—

(1) Number giving a *negative* response to the Schick Test, after previous Diphtheria—13 cases.

(2) Number giving a *positive* response to the Schick Test, after previous Diphtheria—6 cases.

(3) Number giving a *negative* response to the Schick Test, after previous Tonsilitis—3 cases.

(4) Number giving a negative response to the Schick Test, after previous Scarlet Fever—13 cases.

(5) Number giving a *positive* response to the Schick Test, after previous Scarlet Fever—6 cases.

One carrier of Virulent Diphtheria Bacilli was tested and was, of course, negative.

Re-testing for susceptibility to Diphtheria was carried out in 283 persons who had had the full complement of immunising injections. Of that number, 11 failed to attend for the reading of the result of the test. The remaining 272 comprised 231 first re-tests, 38 second, 2 third, and 1 fourth. The second and subsequent re-tests were carried out in those cases which had been found to give a positive response to a previous test, in spite of either having completed the usual course of treatment or of having had additional injections.

The application of the Schick Test to 231 "immunised" persons showed that 205 were now Schick-negative and 26 were still Schick-positive, the corresponding percentages being 88.74 and 11.26 respectively. Compared with 1932, there was, therefore, an appreciable increase in the proportion of successful immunisations by the routine method, for about 27% were still Schick-positive in the 1932 series.

A second re-test was carried out in 38 persons. The number was accounted for by the fact that several belonged to the 1932 series of cases, in whom immunity had not been developed by the end of that year. Only 2 (5.3%) of the 38 persons were now Schick-positive. Those two were again re-tested, after additional treatment and the lapse of a suitable period of time, and were then found to be Schick-negative.

Only one fourth re-test was carried out. The case concerned was the one noted in the 1932 report as being peculiarly refractory to Active Immunisation. The reaction to the test was now negative.

During the year, 14 cases of Diphtheria were notified as having occurred in children who had completed the routine course of injections at various periods prior to the onset of illness. In one of the cases only, had the Schick-test been re-applied after "immunisation." The original diagnosis was upheld in this case, but the application of the Schick Test in the early stages of the disease, Antitoxin having been withheld, produced a negative result. In five other cases, the diagnosis was revised. Of the remaining eight, two had not completed the course of injections. Three more had contracted Diphtheria before the end of three months from the date of the last injection. Only four of the 14 cases could be said to have contracted Diphtheria in spite of immunising injections completed more than three months previously. But if they contracted the disease, at least they all recovered, although in two cases the symptoms were so severe that, at the time of admission to Hospital, a fatal issue appeared to be more than a possibility. The saving of life in cases contracting Diphtheria after completing the usual course of immunising treatment is a very important function of preventive treatment, and in connection with Diphtheria is only beginning to be fully appreciated by the general public. If Immunisation Treatment does not always prevent an attack of Diphtheria, it always prevents death from that disease.

With regard to the cost of immunisation against Diphtheria, the following estimate may be of interest:—

		£	s.	d.
(1)	Total cost of Schick Testing Solutions, Toxoid-Antitoxin Mixture and Toxoid-Antitoxin Floccules	151	14	8
(2)	Ether, Cotton Wool, etc.	15	0	0
(3)	Part Rent and Rates of Building	4	10	0
(4)	Proportion of cost of Coal, Lighting, and Power	6	10	0
(5)	Proportion of Caretaker's Salary	5	10	0
(6)	do. Professional Salaries ...	176	0	0
		£359	4	8

The cost (359 4s. 8d.) represents the sum expended since the Immunisation Clinic was opened, in order to immunise 1,500 persons. No account is taken of the number who have not completed the treatment. The cost per completed immunisation is therefore approximately 4/10d., which is very low and which can only be kept at that figure by large attendances at the Immunisation Clinic. As will be seen from the above figures, professional salaries account for about half of the total cost, and that portion of the financial outlay is irrespective of the number treated. Obviously, then, the controlling factor in the per capita cost, is the number of attendances of persons intending to complete the treatment. It is possible, with good team work, to deal with 75 to 90 cases per session. During the past year, the record attendance for one session (2 p.m. to 5 p.m.) was 108, but that was definitely too many. It is of importance to avoid such pressure of work at an Immunisation Clinic as to give parents the impression that no individual interest is taken in their children; on the other hand, a fairly large collection of parents in the waiting room does something to stabilise decisions in favour of immunisation, giving, as it does, an opportunity of exchanging views on the subject, unhampered by professional (and to many—biased) arguments.

The approximate cost of treating one case of Diphtheria in Wakefield, for the period during which Active Immunisation has been proceeding, was £11. For this sum 46 persons could have been immunised. A total of £6,469 was spent on treatment of cases of the disease during the same period—a sum sufficient to immunise more than twice the total child population of the city; or, viewed from the point of view of the total population, an expenditure which, if continued at the same rate, would make possible the protection of every person in the city (approximately 60,000 population) in about three years.

F. ALLARDICE.

Disinfection.

During 1933, the following disinfection work was carried out:—

No. of Houses disinfected	584
,, Rooms ,,	1036
,, Schools ,,	9
,, Classrooms ,,	50
,, Times Steam Disinfector used	993
,, Beds disinfected	942
,, Mattresses ,,	589
,, Blankets ,,	1480
,, Sheets ,,	1450
,, Counterpanes ,,	1013

No. of Pillows disinfected	1165
,, Bolsters ,,	716
,, Curtains ,,	706
,, Carpets ,,	557
,, Rugs ,,	507
,, Pairs Boots ,,	745
,, Articles of Men's Clothing	1122
,, Articles of Women's Clothing	1387
,, Articles of Children's Clothing	2658
Miscellaneous ...	972

Pathological and Bacteriological Examinations.

Swabs for B. Diphtheria	1000
,, ,, ,, (Virulence)	8
Sputum for B. Tuberculosis	213
,, ,, ,, (Inoculated)	5
Pus and Fluids for B. Tuberculosis and other organisms	23
,, (Inoculated)	13
Urine for B. Tuberculosis and other organisms	98
,, (Inoculated)	14
Fluid for Cerebro-Spinal Fever	22
,, (Inoculated)	11

Blood	Enteric Fever	3
Fæces		7
Urine		3
Swabs and Sputa for Organisms ...		12
Milk for Bacterial Content		43
Milk for Tuberculosis (Inoculated)		45
Hairs for Ringworm Parasites		20
Blood (Wassermann Reaction)		349
For detection of Gonococci		24
Other examinations for Venereal Diseases ...		7
Miscellaneous		136

VACCINATION.

The administration of the Vaccination Acts was taken over by the Corporation (under the Local Government Act. 1929), from the 1st April, 1930. Mr. W. V. Morris (Chief Clerk in the Public Health Department) is Vaccination Officer for the City.

The following Statistics relate to the years 1932 and 1933:—

Year 1932.						Year 1933.	
Number of Births.	Successfully Vaccinated.	Vaccination postponed, or certified as insusceptible of Vaccination.	Died Unvaccinated.	Removed to other districts or places unknown, &c.	Number of declarations of "conscientious objection."	Certificates of successful primary Vaccination of Children under 14 received during the year.	Declarations of "conscientious objection" received during the year.
1026	387	14	50	52	523	381	541

Excluding deaths and removals, 42 per cent. of the children were vaccinated, which is the same figure as in the previous year.

As the above figures show, 51 per cent. of the parents made statutory declarations of "Conscientious Objection" to Vaccination.

The Public Vaccinators for the City are as under:—

No. 1 District (the whole of Wakefield, except the Municipal Wards of Belle Vue, Portobello and Sandal).	Dr. J. B. Lyle, Grove House, Kirkgate, and "Broxbourne," Barnsley Road.
No. 2 District (the Municipal Wards of Belle Vue, Portobello and Sandal).	Dr. D. Downie, "Maybush," Agbrigg Road, Belle Vue.
County Poor Law Institution, Park Lodge Lane.	Dr. J. W. Thomson, "The Grove," College Grove Road.

TUBERCULOSIS.

Notification.

During 1933, 47 cases of Pulmonary Tuberculosis (29 males and 18 females) and 19 cases of Non-pulmonary Tuberculosis (11 males and 8 females) were notified, but 5 cases of Pulmonary disease and 2 of Non-pulmonary disease were subsequently cancelled. In 1932, the corresponding numbers were 54 and 20. Of the 47 Pulmonary cases, 19 died before the end of the year. Of the 19 Non-pulmonary cases 4 died before the end of the year. The 19 Non-pulmonary cases comprised: Disease of bones and joints 4 (including 2 cancelled), of glands 8, of skin 2, of abdomen 2, of meninges 2, and of other organs 1.

New Cases and Mortality, 1933.

(Cancelled Cases excluded).

	NEW CASES.				DEATHS.			
	Pulmonary.		Non-pulmonary		Pulmonary.		Non-pulmonary.	
	M.	F.	M.	F.	M.	F.	M.	F.
0—1 year ...	—	—	—	—	—	—	—	—
1—5 years ...	—	—	1	2	—	—	—	4
5—10 ,, ...	—	—	2	—	—	—	—	—
10—15 ,, ...	—	1	3	1	—	—	—	—
15—20 ,, ...	4	—	1	2	1	—	—	1
20—25 ,, ...	4	4	—	—	4	3	—	—
25—35 ,, ...	7	6	1	2	3	3	—	1
35—45 ,, ...	4	4	1	—	4	2	1	—
45—55 ,, ...	7	—	—	1	7	1	—	—
55—65 ,, ...	1	—	—	—	2	—	—	—
65 and upwards ...	—	—	—	—	—	—	—	—
Totals ...	27	15	9	8	21	9	1	6

Of the 30 persons who died from Pulmonary Tuberculosis, 8 (27 per cent.) had previously received sanatorium treatment, and the condition of these on admission to the Sanatorium was as follows:—

Stadium I., Minus T.B.	1	Stadium II., Plus T.B.	4
Stadium I., Plus T.B.	1	Stadium III., Minus T.B.	—
Stadium II., Minus T.B.	2	Stadium III., Plus T.B.	—

The following periods intervened between the date of notification and the date of death in the pulmonary cases:—

Under 1 month	5	12—18 months	—
1—3 months	4	18—24 ,, ...	3
3—6 ,, ...	4	Over 24 ,, ...	7
6—12 ,, ...	5	Not notified	2

The above table shows that 62 per cent. of the deaths occurred within a year of notification, whilst 7 per cent. had not been notified at all.

Pulmonary Tuberculosis.

Cases left on the Register, 31st December, 1933:—

Year Notified.	TOTAL.	Males.	Females.	AGE WHEN NOTIFIED.			
				0—15 years.	15—25 years.	25—45 years.	Over 45 years.
1919	1	—	1	—	—	1	—
1920	—	—	—	—	—	—	—
1921	—	—	—	—	—	—	—
1922	1	1	—	—	1	—	—
1923	—	—	—	—	—	—	—
1924	2	1	1	—	1	1	—
1925	—	—	—	—	—	—	—
1926	2	2	—	—	1	—	1
1927	3	1	2	—	1	1	1
1928	6	4	2	—	3	3	—
1929	12	9	3	2	3	4	3
1930	8	6	2	—	2	3	3
1931	12	7	5	2	1	7	2
1932	17	12	5	—	4	10	3
1933	24	14	10	1	7	12	4
Totals	88	57	31	5	24	42	17

Condition of Cases on 31st December, 1933:—

Well and Working ...	25	Very Ill, Confined to House	6
Well, not Working ...	15	In Sanatorium	10
Not Well, Working ...	2	In County Hospital ...	4
Not Well, not Working	26		
		Total	88

Non-Pulmonary Tuberculosis.

Cases left on the Register on 31st December, 1933 :—

Year Notified.	TOTAL.	Males.	Females.	AGE WHEN NOTIFIED.			
				0—15 years.	15—25 years.	25—45 years.	Over 45 years.
1913	1	—	1	—	—	1	—
1920	1	—	1	1	—	—	—
1925	1	1	—	1	—	—	—
1926	2	1	1	1	—	1	—
1927	1	1	—	1	—	—	—
1928	—	—	—	—	—	—	—
1929	4	3	1	4	—	—	—
1930	9	2	7	4	1	3	1
1931	14	8	6	10	1	2	1
1932	7	5	2	6	1	—	—
1933	13	8	5	7	2	3	1
Totals	53	29	24	35	5	10	3

Condition of Cases on 31st December, 1933 :—

Well and Working ...	32
Well, Not Working ...	1
Not Well, Working ...	1
Not Well, Not Working	7
Very Ill, Confined to House	3
In County Institution ...	2
In County Hospital ...	1
In Heatherwood Hospital, Ascot	2
In Kirbymoorside Hospital	3
In Other Hospitals ...	1
Total	53

TUBERCULOSIS DISPENSARY.

During 1933, 144 persons were referred to the Dispensary for examination, and of these, 47 (33 per cent.) were found to be tuberculous, 37 affected with pulmonary, and 10 with non-pulmonary disease.

In addition, 122 contacts were examined, but none of these was diagnosed as tuberculous.

The following table shows that of the 37 pulmonary cases, 8 (21 per cent.) were in the early stage (Stadium I.), 18 (49 per cent.) were in the moderately advanced stage (Stadium II.), and 11 (30 per cent.) were in the more advanced stage (Stadium III.).

	Stadium I.		Stadium II.		Stadium III.	
	T.B. Minus.	T.B. Plus.	T.B. Minus.	T.B. Plus.	T.B. Minus.	T.B. Plus.
Males ...	1	4	2	8	—	8
Females	2	1	1	7	—	3
Totals	3	5	3	15	—	11

The 10 non-pulmonary cases comprised disease of :—Bones and Joints 2, Abdomen 1, Peripheral Glands 6, Skin 1.

Of the 144 cases who attended the Dispensary, 90 were sent by general medical practitioners, 26 by School Medical Officers, 5 by Maternity and Child Welfare Medical Officers, 5 by Health Visitors, 1 by Public Assistance Officers, 1 by the Ministry of Pensions, 7 attended voluntarily, and 9 were transfers from other dispensaries.

Cases of Tuberculosis on the Dispensary Register at the End of 1933.

Pulmonary Cases.			*Non-pulmonary Cases.*		
Adults	Males ...	53	Adults	Males ...	4
	Females ...	30		Females ...	9
Children	Males ...	4	Children	Males ...	18
	Females ...	—		Females ...	11
	Total ...	87		Total ...	42

PULMONARY TUBERCULOSIS.—SANATORIUM TREATMENT.

Westmorland Sanatorium, Meathop, near Grange-over-Sands.

	Total.			Insured.			Non-insured.		
	Total	M.	F.	Total	M.	F.	Total	M.	F.
Remaining end of 1932	10	7	3	9	7	2	1	—	1
Admitted 1933	17	13	4	14	13	1	3	—	3
Total treated 1933 ...	27	20	7	23	20	3	4	—	4
Discharged during 1933	16	11	5	13	11	2	3	—	3
Died in Sanatorium ...	1	1	—	1	1	—	—	—	—
Remaining end of 1933	10	8	2	9	8	1	1	—	1

During 1933, 27 patients received Sanatorium treatment, as compared with 26 in the previous year. Of these, 23 (85 per cent.) were insured persons.

Condition on Discharge.

During the year, one patient died in the Sanatorium, and 16 were discharged. Of the latter, one man was sent in as an observation case, and discharged as non-tuberculous. The condition of the remaining 15 was as follows:—

Condition on Admission.		Condition on Discharge.		
		Quiescent.	Improved.	Not Improved.
Stadium I.	T.B. –	5	—	—
	T.B. +	2	1	—
Stadium II.	T.B. –	—	—	—
	T.B. +	—	5	2
Stadium III.	T.B. –	—	—	—
	T.B. +	—	—	—
	Totals	7	6	2

Taking all classes, the immediate result of treatment in the Sanatorium was that 44 per cent. were improved to the extent of apparent quiescence of the disease, 37 per cent. were improved, but not to the same extent, and 19 per cent. were not improved.

Taking the early cases by themselves, 87 per cent. were improved to the extent of apparent quiescence of the disease, and 13 per cent. were improved, but not to the same extent.

The periods of stay in the Sanatorium were as follows : —

Up to 3 months ...	—	12—15 months	1
3—6 months	6	15—18 ,, ...	—
6—9 ,, ...	3	18—21 ,, ...	1
9—12 ,, ...	4	21—24 ,, ...	—

Sanatorium Arrangements.

The Wakefield Corporation continued to use accommodation at the Westmorland Sanatorium, Meathop, near Grange-over-Sands, on the basis of 10 rented beds, with an option on more beds, if required.

NON-PULMONARY TUBERCULOSIS.

Institutional Treatment.

	Total.	Kirbymoorside Hospital.			Heatherwood Hospital Ascot, Berks.		
		Total.	M.	F.	Total.	M.	F.
Remaining end of 1932 ...	9	7	4	3	2	2	—
Admitted during 1933 ...	1	1	1	—	—	—	—
Discharged 1933	5	5	3	2	—	—	—
Died 1933	—	—	—	—	—	—	—
Remaining end of 1933 ...	5	3	2	1	2	2	—

The five children discharged were as follows : —

(1) Male, aged 7 years.—Sacro-iliac disease. In Institution 14 weeks. Disease quiescent.

(2) Female, aged 11 years.—Tuberculosis of Elbow. In Institution 63 weeks. Disease quiescent.

(3) Male, aged 6 years.—Tuberculosis of Hip. In Institution one year nine months. Disease quiescent.

(4) Male, aged 5 years.—Tuberculosis of Spine. In Institution one year two months. Disease not quiescent. Discharged on account of being Diphtheria Carrier.

(5) Female, aged 13 years.—Tuberculosis of Hip. In Institution two years nine months. Disease quiescent.

Care Work for the Tuberculous.

Extra nourishment was granted by the Corporation to patients during the year, and clothing was provided for several patients by the Social Service Council.

REMARKS ON TUBERCULOSIS.

The administrative work connected with Tuberculosis was carried out on the usual lines. The circumstances of all cases notified are investigated, and continuous supervision is maintained by the Health Visitors so long as the cases remain on the Register. This Register is revised annually, and the names of all cases who have recovered, according to the rules laid down by the Ministry of Health, who have died, or who have left the City, are removed. Printed and verbal instructions as to precautions against the spread of infection are given, and every effort is made to secure compliance with these instructions. Sputum flasks and disinfectant fluid are supplied free, and disinfection of bedding, etc., is carried out as required. The services of the Tuberculosis Officer are available for purposes of diagnosis and advice regarding suitable lines of treatment, either at the Tuberculosis Dispensary or for consultation in the home. Radiological examinations are made at the Clayton Hospital. Contacts are encouraged to attend at the Dispensary for examination. Sanatorium treatment at the Westmorland Sanatorium is available for suitable pulmonary cases, and hospital treatment is likewise available for children suffering from non-pulmonary disease at the Yorkshire Children's Orthopædic Hospital at Kirkbymoorside, and elsewhere, as well as locally at the Clayton and County Hospitals. The 26 special houses provided for the families of ex-Sanatorium patients have all been occupied during the year, and the results continue satisfactory. The non-pulmonary group of cases can also have advice and treatment at the Orthopædic and Ultra-Violet Ray Clinics of the Corporation. The only hospital facilities available for advanced cases are at the County Hospital (Poor Law), but provision will be made for these cases at the new Snapethorpe Hospital.

Generally speaking, the arrangements may be regarded as satisfactory. The great defect of the system continues to be the lateness of notification in a considerable proportion of the pulmonary cases. About 43 per cent. of the deaths from pulmonary disease occurred within six months of notification. If we exclude a few acute cases, running a rapid course, the remainder of these could not be regarded as having much chance of benefiting by treatment. We are, however, doing everything possible to educate the public on the importance of securing early treatment, and periodically a notice regarding this is inserted in the local edition of "Better Health." We are also trying to get a better attendance of contacts at the Dispensary, and the numbers were increased during the year.

It will have already been noted that some seven per cent. of the samples of milk tested bacteriologically were infected with tubercle bacilli, and the importance of securing milk free from tuberculosis, as well as other infections, cannot be too strongly emphasised. This involves the production of milk from Certified or Grade "A" (Tuberculin Tested) herds, or the subjection of ordinary milk to treatment by heat, namely, boiling, or better still, pasteurisation.

VENEREAL DISEASES.

Treatment of Venereal Diseases at the Venereal Diseases Clinic, Clayton Hospital, Wakefield, 1933.

(*a*) Number of Wakefield persons dealt with for the first time and found to be suffering from:—

	Total.	Males.	Females.
Syphilis	45	22	23
Soft Chancre ...	—	—	—
Gonorrhœa	55	41	14
Conditions other than Venereal ...	35	26	9
Total ...	135	89	46

(*b*) Total Number of Attendances at the Out-Patient Clinic:—

	Total.	Males.	Females.
Syphilis	1183	688	495
Soft Chancre ...	—	—	—
Gonorrhœa	670	379	291
Conditions other than Venereal ...	145	80	65
Total ...	1998	1147	851

(*c*) Number of Attendances of Wakefield Patients for irrigation and treatment (not including attendances at Clinic):—

Total.	Males.	Females.
2996	2143	853

(*d*) Aggregate Number of In-patient Days of Wakefield Patients:—

	Total.	Males.	Females.
Syphilis	67	60	7
Gonorrhœa	140	—	140
Total ...	207	60	147

(*e*) Number of doses of Arsenobenzol Compounds (N.A.B. and Sulpharsenol) given to Wakefield patients:—758.

Dr. Frew, the Medical Officer of the Venereal Diseases Clinic at the Clayton Hospital, has kindly supplied me with the following remarks:—

Again I have to record an increase of 10 in the number of new Wakefield patients, making the total 135 for the year.

In view of this it is interesting to analyse further the incidence of disease in and around the Borough by taking the whole work of the clinic, and comparing with the West Riding patients, who come from anywhere within a radius of five or six miles—about 10 miles in some directions. Taking the last three years and including the few patients who were transferred from other clincs, we have:—

New patients.		
1931.	1932.	1933.
333	360	335

The following table shows the incidence of the diseases compared (14 transfers must be added to the 1931 total as those were not included in the Ministry Report for that year). It is obvious that the increase is chiefly due to Syphilis.

	1931.		1932.		1933.	
	Wake-field.	West Riding.	Wake-field.	West Riding.	Wake-field.	West Riding.
Syphilis	25	51	32	67	45	51
Soft Chancre	—	4	—	3	—	3
Gonorrhoea	43	84	52	99	55	90
Conditions other than V.D.	39	73	41	66	35	56
Totals	107	212	125	235	135	200
Grand totals	+ 14 = 333		360		335	

This further table shows a division of all the new cases of Syphilis diagnosed at the clinic as to stages of disease:—

	1931.			1932.			1933.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Syphilis Primary ...	11	—	11	13	—	13	9	1	10
,, Secondary ...	22	10	32	19	15	34	18	13	31
,, all other stages	11	13	24	15	10	25	22	18	40
,, Congenital ...	3	6	9	9	6	15	5	5	10
Transfers from other Clinics	7	7	14	6	6	12	4	1	5

The primary and secondary cases are all comparatively fresh infections, and it is of interest to note that in the three years only one female presented herself in the primary stage, i.e., before there was any systemic infection, the Wasserman reaction being still negative.

The outstanding feature of last year is the number of late cases, and as these are nearly always sent by medical practitioners or discovered in hospital, it points either to greater vigilance or greater skill in diagnosis amongst the medical profession.

It should be mentioned that a fair number of patients are sent from the Maternity Home, the school clinic, and the Public Assistance Institution. These latter are given treatment in the hospital until they are able to attend at the clinic as out-patients, and it is worthy of note that they are amongst the most regular in their attendance.

On the whole the attendance has been very good, and the response to reminders, when necessary, more gratifying than usual, although there is still the worrying knowledge that many who could be saved are, by their own carelessness or indifference, laying up for themselves a prospect of serious and fatal disease.

A. W. FREW.

LEEDS GENERAL INFIRMARY VENEREAL DISEASES CLINIC.

During 1933, 7 patients from Wakefield applied for examination, and 4 were found to be suffering from Venereal Disease (Gonorrhœa 3 males, and Syphilis 1 female). The total attendances were 137 (107 by males and 30 by females), as compared with 49 in 1932. The aggregate number of in-patient days was nil, and the number of doses of arseno-benzol compounds given to Wakefield patients was 29.

Pathological Examinations in Connection with Venereal Diseases, 1933.

	Total.	For the detection of Spirochaetes.	For the detection of Gonococci.	Wassermann Reaction.	Other Examinations.
County Hall Laboratory ...	380	—	24	349	7
Clayton Hospital Clinic	372	4	357	—	11
Leeds Infirmary Clinic	10	—	3	6	1
Totals ...	762	4	384	355	19

MATERNITY AND CHILD WELFARE.

By Dr. Jessie Eeles, Medical Officer for Maternity and Child Welfare.

Supervision of Midwives.

18 Midwives gave notice of their intention to practise. Of these 6 were on the Staff of the County Hospital, 3 of the Maternity Hospital, 2 of a Private Nursing Home, and 7, including 2 municipal midwives, were engaged in district work. The district midwives were regularly inspected during the year, and the Rules of the Central Midwives' Board were found to be generally complied with.

Medical Help.

81 notifications of sending for medical aid were received from midwives in respect of home confinements; 65 related to the mother and 16 to the infant.

For Mother.

Ruptured Perineum ...	37	Threatened Abortion ...	1
Long Labour	8	Oedema and Albuminuria	1
Cough	2	Pyrexia	6
Vomiting of Pregnancy	1	Pain in the side ...	1
Antepartum Hæmorrhage	3	Adherent Placenta ...	1
Breech Presentation ...	2	Post Partum Hæmorrhage	1
Inflamed Breast ...	1		

For Infant.

Feebleness	7	Melæna	1
Phimosis	1	Discharging Eye ...	3
Pemphigus	1	Deformed Throat ...	1
Still-birth	1	Deformed Hand ...	1

Maternity Homes.

The one Private Maternity Home on the Register was visited during the year, and everything was found to be satisfactory.

Ante-Natal Clinic.

During 1933, the Ante-Natal Clinic continued to be held twice weekly at the Maternity Hospital in Blenheim Road. New patients attended on Wednesdays between 10 a.m. and 12 noon, and subsequent visits were paid on Fridays between 2 and 5 p.m.

During the year, 671 expectant mothers attended—559 new cases and 112 patients who had begun to attend in 1932. 133 out of the 671 patients were from outside the City. The total number of attendances was 3,220, or 399 more than in 1932.

135 cases were referred to the Clinic by midwives, and 30 cases by doctors. The same routine was carried on as in 1932, except that the blood-pressure of each patient was taken and recorded at each visit. Patients who failed to keep their appointments were followed up as before.

The age groups of new cases attending the Clinic in 1933 were as follows:—

Age.	Primiparæ.	Multiparæ.
Under 20 years ...	20	3
20 to 25 years ..	85	62
25 to 30 years ..	58	112
30 to 35 years ..	41	92
35 to 40 years ...	7	56
Over 40 years ..	1	22
Total	212	347

8.0 per cent. of the patients attended for the first time before the 4th month of pregnancy.

50.0 per cent attended for the first time between the beginning of the 4th and the end of the 6th month.

23.3 per cent. attended for the first time during the 7th month.

12.2 per cent. attended for the first time during the 8th month.

6.5 per cent. attended for the first time during the last month.

Most of the cases appearing for the first time at the Clinic during the last month of pregnancy are patients who are already under the care of a district midwife and who are sent for examination about the 36th week. One does not therefore expect that this figure will be much reduced.

The following conditions were found and treated:—

Constipation	84	Epistaxis	1
Indigestion and Vomiting	105	Epilepsy	3
Dental Caries	87	Backache, Cramp, etc.	39
Hæmorrhage	14	Chorea	3
Laryngitis, Bronchitis, etc.	37	Lupus	1
Pulmonary Tuberculosis	4	Enlarged Thyroid	3
Cystitis, Pyelitis	75	Vaginal Discharge	20
Chronic Nephritis	5	Gonorrhœa	3
Toxæmia of Pregnancy	187	Deformed Pelvis	5
Skin Diseases	8	Justo minor Pelvis	20
Styes, Boils, and Minor Sepsis	5	Not Pregnant	12
Pruritus	9	Retroflexions replaced	3
Organic Heart Disease	13	Malpresentations corrected	28
Functional Heart Disease	12	Threatened Miscarriage	13
Varicose Veins	67	Hydronephrosis	1
Anæmia	8	Abortion	2
Fainting, Dizziness, etc.	8	Missed Abortion	2
Nervous depression, Headaches, etc.	24	Hydramnios	2
Insomnia	47	Antepartum Hæmorrhage	11
Congenital dislocation of Hip	1	Hydrorrhœa Gravidarum	1
Old Tubercular Hip	1	Cystocele and Rectocele	1
		Scoliosis (old Empyema)	1

Blood was taken for a Wassermann Reaction in 10 cases, and only one was positive.

One patient was X-Rayed, and the diagnosis of Spondylolisthetic pelvis was confirmed. This patient had a normal delivery, as the head was in the pelvis early.

85 per cent. of the patients attending the Clinic had some abnormality or discomfort requiring attention. Only 102 out of the total number felt, and were, perfectly well throughout.

The following 88 patients were admitted to the hospital from the Clinic for Ante-natal treatment:—

Toxæmia of Pregnancy ...	47	Heart Disease	3
Pyelitis	11	Induction	6
Cystitis	1	Chorea	3
Antepartum Hæmorrhage	2	Vaginal discharge ...	3
Vomiting	5	Tuberculosis (debilitated)	1
Breech (for Version under general anæsthetic) ...	3	Chronic Nephritis ...	3

Dental Treatment.

Dental Treatment for expectant mothers was continued during the year on the same lines as in 1932, an evening session being held whenever there was a sufficient number of cases waiting for treatment. The system has the obvious disadvantage that some are kept waiting three, four, or even more weeks before being sent for. In all, 19 sessions were held, the appointments made numbering 122, and of these 85 were kept and 37 not kept—a 69 per cent. attendance. The work actually done was extractions 171, fillings 16, and other operations — mostly scalings, 16. The extractions were all done under local anæsthesia, there being no facilities for the administration of a simple general anæsthetic.

The Maternity Hospital.

The number of cases admitted during 1933 was 379, including 110 from outside the City. Out of the total, 23 were emergency admissions, 15 from Wakefield and 8 from outlying districts. 352 patients were delivered in hospital. In 326 cases the actual delivery was done by a midwife, and in 26 cases by a doctor.

In the following cases medical treatment was required for some abnormality:—

(*a*) Ante-Natal—116.

Toxæmia	65	Cystitis	2
Pyelitis	7	Epilepsy	2
Antepartum Hæmorrhage	7	Hydramnios	2
Heart Disease	5	Cough	2
Contracted Pelvis	4	Cystocele and Rectocele	1
Chorea	3	Hæmorrhoids	1
Vaginitis	3	Oedema of Vulva	1
Breech-Version (under general anæsthetic)	3	Abscess above Ear	1
Eclampsia	2	Diarrhœa and Vomiting	1
Doubtful Presentation	2	Tuberculosis and Vomiting	1
		Retroverted gravid uterus with retention	1

X-Ray examination—1 (hydramnios).

(*b*) During Labour—27.

Foetal Distress	4	Antepartum Hæmorrhage	1
Breech	4	Failed Forceps before admission	1
Uterine Inertia	3	Anencephaly	1
Prolapsed Cord	3	Eclampsia	1
Prolapsed Arm	2	Small Pelvis and Toxæmia	1
Maternal Distress	1	Heart Disease and Small Pelvis	1
Face Presentation	1	Obstructed Labour (spondylolisthesis)	1
Doubtful Presentation	1		
Inertia and Rigid Soft Parts	1		

(*c*) After Labour—29.

Rise of Temperature	7	Mastitis (suppurative)	1
Pyelitis	4	Red Lochia	1
Sore Nipples	4	Anæmia	1
Cystitis	3	Septic Spots on Abdomen	1
Phlebitis	2	Hysteria	1
Mastitis (Non-suppurative)	2	Boils	1
Bell's Palsy	1		

(*d*) For the Infant—21.

Convulsions	4	Inflammation of Eyes	2
Prematurity and Feebleness	3	Melæna and Hæmatemesis	1
Asphyxia	3	Spina Bifida	1
Bronchitis	2	Purulent Rhinitis	1
Pemphigus	2	Anencephaly	1
		Cerebral Hæmorrhage	1

90 Patients required to have the perineum sutured.

Instrumental delivery was required in only 10 cases (i.e., 2.8 per cent. of the total). The reasons for interference were as follows:—

Uterine Inertia	4	Foetal Distress	4
Maternal Distress ...	1	Prolapsed Cord	1

Cæsarean Section was performed 7 times (2 per cent.), and for the following reasons:—

Heart Disease and Contracted Pelvis ...	2	Eclampsia (6th Month)	1
Toxæmia and Contracted Pelvis	1	Severe Toxæmia of Pregnancy	1
Obstructed Labour due to spondylolisthetic Pelvis	1	Contracted Pelvis ...	1

4 of these patients recovered, and 3 died.

The following cases required other forms of operative treatment:—

Induction of Premature Labour	6	Incision of breast abscesses (3 operations)	1
External Version under General Anæsthetic ...	3	Incision of abscess above ear	1
Internal Version—Prolapsed Arm ...	2	Manual removal of Adherent placenta ...	1

There was one case notified as Puerperal Fever. This patient had a normal confinement with no lacerations. She was transferred to Clayton Hospital on the 4th day of puerperium, and was discharged cured on the 14th day.

There were 6 notifications of Puerperal Pyrexia. The following were the causes:—

Retained membranes—slightly offensive lochia	2	Early Pulmonary Tuberculosis	1
Cystitis	1	Peritonitis	1
		Cause doubtful	1

The case of cystitis was transferred to Clayton Hospital, and recovered. The patient with peritonitis died. She was an emergency case, and had a Cæsarean Section for Spondylolisthesis after the membranes had been ruptured for some time.

There were 2 cases of Pemphigus Neonatorum in the Hospital in 1933. Both were mild cases, and both recovered. The second case had no relation to the first.

There were no cases of Ophthalmia Neonatorum, and only 2 cases of slight inflammation of the eyes.

There were 18 Still-births and 12 infant deaths within 10 days of birth. The causes of death were these:—

Asphyxia Neonatorum	3	Purulent Rhinitis and Prematurity	1
Prematurity	2	Capillary Bronchitis	1
Convulsions	2	Anencephaly	1
Spina Bifida	1	Cerebral Hæmorrhage	1

There were 4 maternal deaths, giving a case mortality of 1.1 per cent. One was an eclampsia who died within 6 hours of admission; one was a severe case of toxæmia without fits, who persistently got worse in spite of treatment and Cæsarean Section. A third was the case of peritonitis following an emergency Cæsarean Section for Spondylolisthesis already mentioned. The fourth died from heart failure almost immediately after Cæsarean Section for contracted pelvis complicated by toxæmia.

Ante-Natal Supervision and Morbidity.

Of the 352 patients delivered in the Maternity Hospital during 1933, 308 had had regular ante-natal supervision (i.e., the patients had attended for the first time not later than the 36th week of pregnancy and returned to the Clinic when instructed to do so). Among the 308 there was one death (0.32 per cent.) due to toxæmia, becoming worse in spite of treatment and in spite of removal of the foetus by Cæsarean Section.

The following abnormalities in the confinement or the puerperium of these supervised cases occurred:—

Torn Perineum	69	Mastitis (one suppurative)	2
Cystitis and Pyelitis (all mild cases)	14	Pyrexia	2
Forceps deliveries	7	Induction followed by labour complicated by prolapse of cord	1
Inductions followed by normal labour	5	Placenta Prævia (Version)	1
Cæsarean Sections	5	Prolapsed Arm (replaced)	1

Antepartum Hæmorrhage	1
Manual removal of adherent placenta ...	1
Episiotomy for rigid perineum	1
Puerperal Fever (mild case)	1
Bell's Palsy	1

The number of cases with any abnormality, however slight, was 107 (34.7 per cent.). Excluding the patients who had perineal lacerations alone, and the inductions followed by normal delivery, the number with abnormalities was 38 (12.3 per cent.).

The average duration of stay of patient in hospital was 17.15 days.

Training of Pupil Midwives.

During 1933, 8 new pupils commenced their training for the certificate of the Central Midwives Board. 6 passed the examination of the Board during the year. The pupils attend lectures at the Leeds Medical School, and receive tutorial and practical instruction from the Matron and the Sister of the Hospital.

District Cases.

184 Confinements, as compared with 171 in 1932, were attended by the two Municipal District Midwives, assisted by the pupil midwives. In this way the latter gain experience of home midwifery.

Post-Natal Clinic.

The Post-Natal Clinic was held weekly throughout the year, the patients being seen on Wednesdays at 10 a.m., along with the new ante-natal cases. As in previous years the patients attending the post-natal clinic are chiefly those who have been confined in the hospital. They are asked to report at the end of the sixth week of the puerperium, whether the confinement has been normal or otherwise. In addition, patients complaining of any form of gynæcological trouble are sent from Welfare Centres to be examined and referred for suitable treatment.

During 1933, the number of patients examined was 226, and the attendances totalled 263.

Of the 226 cases, 126 (i.e., 55.7 per cent.) had no complaints and no abnormality of the pelvic organs. In many of the cases the complaints were only minor ones. The abnormal conditions found and treated or referred for treatment were these:—

Old Toxæmia Cases ...	81	Old Cæsarean Section Cases	3
Constipation	29	Rectocele	2
Retroversion	22	Varicose Veins	1
Debility, "nerves," and Anæmia	17	Arthritis (hip)	1
Persistent Lochia ...	11	Heart Disease	1
Menorrhagia and Metrorrhagia	9	Lump in Breast	1
Backache	8	Chronic Nephritis ...	1
Dysuria	6	Ventral Hernia ...	1
Retroflexion	6	Coccydynia	1
Fissure in Ano	5	Syphilis	1
Vaginal Discharge ...	5	Dysmenorrhœa	1
Hæmorrhoids	4	Sterility	1
Boils	3	Recent Miscarriage ...	1
Prolapse	3	Urethral Caruncle ...	1
Cystocele	3	Deficiency of Perineum ...	1
		Cervical Laceration ...	1

Puerperal Fever and Puerperal Pyrexia.

During 1933, 15 cases were notified under the regulations, 11 being cases of Pyrexia, and 4 cases of Puerperal Fever. Of the 11 cases of Pyrexia, 6 were attended at the confinement by midwives, and 4 were attended by doctors assisted by midwives, and one case was attended by a doctor and a handywoman. 6 of the cases were notified from the Maternity Hospital, 3 from the County Hospital, and 2 by private doctors. 4 cases were treated at the Maternity Hospital, 3 at the Clayton Hospital, 3 at the County Hospital, and one at home. One patient died. Inquiries into the causes of the Pyrexia gave the following results:—

Offensive Lochia	3	Cystitis	1
Cause doubtful	3	Pulmonary Tuberculosis.	1
Phlegmasia and early Pulmonary Tubercle ...	1	Peritonitis	1
		Mastitis	1

Of the 4 cases of Sepsis, 3 were delivered by midwives and the fourth was a case of septic abortion not seen by a doctor till sepsis was established. One was notified from the Maternity Hospital, and she was transferred to Clayton Hospital, and recovered. Two were notified by private practitioners and removed to the County Hospital. One patient died. The case of septic abortion was admitted to the Clayton Hospital and recovered.

Ophthalmia Neonatorum.

2 cases of Ophthalmia Neonatorum were notified during 1933, i.e., 0.22 per cent of the notified live births. 7 cases were notified in 1932, 8 in 1931, 6 in 1930, 10 in 1929, 16 in 1928, 9 in 1927.

Cases Notified.	Treated.		Vision Un-impaired.	Vision Impaired.	Total Blindness.	Deaths.
	At Home.	In Hospital.				
2	1	1	2	—	—	—

Both of these cases were attended at the confinement by a doctor and a handywoman. In one case the mother had a vaginal discharge. In neither case was the gonococcus proved to be the cause of the condition.

Pemphigus Neonatorum.

3 cases of Pemphigus Neonatorum were notified during the year. Two were notified from the Maternity Hospital and one was notified from a Child Welfare Centre. All were mild cases, and all three recovered.

HOME VISITING BY HEALTH VISITORS.

The six district Health Visitors, who also act as School and Tuberculosis Nurses, carried out the following work during the year:—

Infant Visiting—	Primary Visits	896
	Re-visits (under 1 year)	7,344
	Re-visits (1—5 years)	6,626
	Total Visits ...	14,866
Expectant Mothers—	Primary Visits	235
	Re-visits	508
	Total Visits ...	743

Visits *re* Still Births and Infantile Deaths	57
Attendances at Child Welfare Centres	298
Attendances at Tuberculosis Dispensary	104
Visits to Tuberculosis Patients	979
Attendances at Medical Inspection of School Children	228
Number of Visits to Schools	574
,, ,, Examinations at Schools *re* Cleanliness	10,028
,, ,, Examinations at Schools *re* Treatment	1,170
,, ,, Homes Visited *re* Contagious Disease	1,313
,, ,, Homes Visited *re* Verminous and neglected Children	46
,, ,, Homes Visited *re* Treatment	2,145
,, ,, Homes Visited for Other Purposes	379
Total Number of Homes Visited *re* School Children	3,883
Number of Homes Visited *re* Mental Defectives	480
Visits for Purposes of Nursing	77
Miscellaneous Visits	78
Total Number of Home Visits (all purposes)	21,163

Infant Life Protection.

The Health Visitors act as Visitors under Part 1 of the Children Act (1908). There were 4 children on the Register at the beginning of the year. No new cases were added and none were taken off during the year. All the children were satisfactorily cared for.

CHILD WELFARE CENTRES.

Numbers on the Registers, 1933.

Centres.	Mothers.	Infants.	Children 1—5 yrs.	Expectant Mothers.
Principal Child Welfare Centre				
Miss Farrar's District	284	221	130	31
Miss Staniforth's District	338	239	132	18
Miss Gardner's District	192	131	94	—
Miss Robertshaw's Dis.	255	177	126	22
Belle Vue Centre (Miss Thorp)	238	241	121	4
Snapethorpe Centre (Miss Dearden)	377	339	213	4
Totals	1684	1348	816	79

Attendances.

Centres.	Mothers.	Infants.	Children 1—5 yrs.	Expectant Mothers.
Principal Child Welfare Centre				
Miss Farrar's District ...	2393	2953	922	93
Miss Staniforth's District	2535	1664	1109	43
Miss Gardner's District	1471	1082	606	—
Miss Robertshaw's Dis.	2702	1759	1110	61
Belle Vue Centre ... ... (Miss Thorp)	2127	1367	836	15
Snapethorpe Centre ... (Miss Dearden)	2969	1802	1569	15
Totals ...	14197	10627	6152	227

As in 1931, Centres were held at the Principal Child Welfare Centre on four afternoons each week—Mondays, Tuesdays, Wednesdays and Thursdays—at Belle Vue once a week on Tuesday afternoon, and at Snapethorpe on Wednesday afternoons. During 1933, 1,458 infants and 220 mothers were medically examined at the Centres. Of the 1,458 infants, 854 (i.e., 58.5 per cent.) were found to be normal and satisfactory at their first attendance, while 604 had some defect or ailment requiring supervision or treatment. The total number of medical examinations made was 9,653 (8,866 children and 787 mothers). All the infants attending the Centres are medically examined at least once a month, and more often, of course, when necessary. The Voluntary Helpers from the Babies' Welcome Association have continued to give their most valuable assistance in the running of the Centres. From the middle of April till the middle of October, 1933, 16 debilitated mothers and 13 babies were sent at the Corporation's expense each for a fortnight's holiday to the Yorkshire Home for Mothers and Babies at Withernsea. During the last fortnight of the season three mothers without babies were sent, as it was suggested by the Committee of the Home that the climate in October might not be suitable for very young babies. The number of patients sent was smaller than last year, not because the value of the scheme was in the least doubtful, but because the age of the infants suitable for admission to the Home was reduced from under eighteen months to under seven months. This naturally reduced the number of suitable patients very considerably.

INFANT FEEDING.—Infants Born in 1932.

	Infants born 1932.	Percentage.
Wholly breast fed for 6 months or longer	692	83.55
Wholly breast fed for periods less than 6 months, but more than 1 month	79	9.54
Combined breast and artificial feeding for periods of 6 months or longer	22	2.66
Combined breast and artificial feeding for periods of less than 6 months, but more than one month	24	2.93
Artificially fed from 1 month or earlier	11	1.32
Totals ...	828	100.00

SUPPLY OF DRIED MILK, 1933.

Sold at Cost Price	2,717 lbs.
Sold at Half Price	663 ,,
Sold at Quarter Price	2,465 ,,
Supplied Free	13,425 ,,
Total ...	19,270 lbs.

The amount of Dried Milk supplied in 1933 is less than that supplied in 1932 by 323 pounds (the falling off is accounted for mainly by the number of pounds sold at cost price, which is 1,035 lbs. less than last year).

The cost to the Corporation for Dried Milk, free or sold at less than cost price, amounted to £843 19s. 2d.

138 packets of Lactagol were also given out during the year, 59 being sold at cost price, 16 sold at half price, 7 sold at quarter price, and 56 given free.

SOME OBSERVATIONS AND COMMENTS ON TOXÆMIA OF PREGNANCY.

Since October, 1932, every patient attending the Wakefield Ante-natal Clinic has had her blood pressure taken and recorded at each visit. Previous to this blood pressure had been taken only when a deviation from the normal was suspected, either from symptoms, from the appearance of the patient, or from the presence of albumen in the urine. The Salicyl Sulphonic Acid Test for albumen is used. It was realised from these observations that in this district at least, albuminuria appears late in toxæmic cases, and that the patient may already be seriously ill when only a trace is present. It was therefore decided to record the blood pressure at each ante-natal attendance, even though this means taking up extra time at an already overcrowded clinic.

This procedure, instead of being irksome, has proved to be extremely interesting.

Normally the blood pressure in an expectant mother is round about 110/70, and in many cases it remains so with very little variation till the end of the ante-natal period. Some show a tendency to rise in the latter weeks to 130/70 or even 135/70 without the patient feeling in the least out of sorts, but when the pressure rises to 140/70 or more, the patient must be regarded as definitely toxæmic and be treated as such. In many multiparæ round about the age of 40, the pressure is already high to start with, but as at least half the cases at that age have a normal pressure, one suspects that those whose pressure is raised have already suffered kidney damage, probably during one of their previous pregnancies, and therefore even in these patients a raised pressure must not be regarded lightly, though it is not always evidence of true toxæmia. The treatment advised at the Wakefield Clinic is the usual treatment—rest, diet, excess of fluids and suitable aperients. If in spite of care the condition gets worse, then the patient is admitted to hospital. In a few cases fluids have to be restricted, instead of increased, if the kidneys are not able to cope with the excess.

Under these conditions, mild cases can be kept under control, and a slightly raised pressure remains the only sign of toxæmia, the patient being quite unaware of any abnormality. Even in more severe cases a rise of pressure may be the only sign noted months before there are any symptoms.

What are the other signs and symptoms in these treated cases that tell us that the case is becoming serious? Unfortunately they are very few. Oedema is rare in this area in patients treated in this way, whereas we know that in untreated cases of eclampsia admitted to hospital as emergencies, a history of œdema of several weeks' duration before the onset of the fits is usually obtainable.

There may be a little heartburn, or occasional vomiting. These are rather more important than they appear to be.

Headaches should be regarded seriously even though there is no albumen in the urine.

If even a trace of albumen appears in the urine of a patient under treatment for toxæmia it is probably wisest to admit her to hospital. She may look and feel well, but it is the safest course. Progress towards eclampsia after this point is usually rapid.

These apparently trivial symptoms, along with a persistently raised blood pressure and sometimes a tendency for the diastolic to approach the systolic pressure, are all we have to guide us as to the seriousness of the case.

What is accomplished by diet and rest it is difficulty to say, as in this kind of work the only controls we have are emergency cases, and of these there are no detailed ante-natal records available. We have to rely on the patient and her relatives for an account of the illness. We are certainly not treating the source of the toxæmia. The original source must be in the foetus or its appendages, as the same mother may have toxæmia in one pregnancy and not in another. As long as she remains pregnant the toxin, whatever it may be, continues to be manufactured, and to menace her life. By treatment we are certainly aiding its elimination. By reducing the ordinary work of the kidneys to a minimum we are helping them to cope with this task. If the toxæmia is not severe, this increased elimination may be enough to keep the patient in a normal condition. By colon washouts, etc., we are probably also merely hastening elimination and avoiding the addition of a second sort of toxæmia to the more serious one. In other words, we are minimising the amount of toxin retained in the patient's body, and that minimum varies with different patients and different pregnancies, but the actual rate of manufacture of the toxic material is not controllable, till we know more about its nature. It follows that the only form of treatment which is of any use if the toxæmia is increasing rapidly is to terminate the pregnancy.

One effect of treatment is that we are suppressing symptoms and we are thus making our task in selecting serious cases more difficult. Most of the symptoms ordinarily associated with this condition, it would seem, come not from the toxæmia itself, but from its secondary effect on the kidneys. As soon as renal damage occurs, a vicious circle is set up, and symptoms arise which even the patient recognises as abnormal. This renal damage occurs early and gradually in untreated cases, and late and in a fulminating manner in those who have had treatment. It is the complication to be avoided if it is humanly possible. It is far easier to prevent it than to cure it once it has happened. A patient whose kidney function has broken down under the strain of pregnancy toxæmia has a 50 per cent. chance of being left with a legacy of chonic nephritis, meaning greater and greater danger with succeeding pregnancies, as well as a shortened expectation of life. Therefore even though it means doubling our vigilance and frequently having difficulty in persuading the patient that treatment is required at all, we must persist in commencing treatment at the first sign of a rise of blood pressure. In this way, and in this way only, will the patients' future health be safeguarded. The blood pressure seems to be at present the only reliable known guide to the presence of toxæmia. There is no definite periodicity and no uniformity about blood pressure curves in different patients. A few can be kept in control by diet, rest and elimination, the pressure falling and remaining within normal limits, but in most cases after a temporary fall it tends to rise again, and this tendency is most marked in the last four weeks.

Once a patient has had a raised pressure, even though it has fallen to normal, supervision must not be relaxed. Patients who have had urinary infections in the earlier months are very liable to toxæmia later. Patients who have previously suffered from nephritis and have recovered satisfactorily are no more liable to toxæmia than other patients, but no doubt if it does develop, it is more serious. A few patients have normally a high pressure, and these will usually give a history of parents or relatives suffering from hyperpyesis or dying of cerebral hæmorrhage.

Out of 571 patients attending the Ante-natal Clinic in 1933, 187 were more or less toxæmic. Taking into consideration the proportions of primiparæ and multiparæ attending the clinic, primiparæ appear to be about twice as susceptible as multiparæ, and if serious cases are considered, they are between three and four times as liable. Of 127 of these cases where the history of the subsequent confinement was definitely obtainable, 100 had full time living healthy babies, 18 had premature living babies, 4 had full-time stillborn children, and 5 had premature stillbirths. Of these 5, however, 2 were anencephalic foetuses, and one patient had a Cæsarean Section for severe toxæmia occuring early in pregnancy, before the foetus was viable.

Only 67 out of the 127 cases had albumen in the urine, and 59 of these showed only a faint trace. Two patients required Cæsarean Section. One developed eclampsia before 6 months. She was a multipara, and was admitted from the clinic with a trace of albumen, a blood pressure of 195/100, no œdema, but complaining of headache. The pressure two weeks previously had been 145/80, and the patient had been told to diet and rest. She had not been in hospital more than an hour when she had her first fit. The next specimen of urine was loaded with albumen, and œdema appeared rapidly. Cæsarean Section was performed next day. The patient recovered.

The other patient was a primipara, 7 months pregnant. She was admitted from the clinic with no albumen, a pressure of 150/90 and no œdema. Previous to this the pressure had been normal. In spite of treatment her pressure rose a little during the next three days, there was no œdema, no albumen, but some nausea and a little vomiting. On the 4th day after admission the pulse rate began to increase. The patient became rather drowsy, a trace of albumen appeared in the urine, and the foetal heart stopped. The drowsy condition resembled a mild diabetic coma, but there was no sugar in the urine. Cæsarean Section was performed the same day, and the specimen of urine obtained just before operation was loaded with albumen. The patient never properly recovered consciousness. She had no fits, but the pulse rate increased, the temperature rose, and she died within 24 hours of operation. There were no severe cases of antepartum hæmorrhage in this series. A few had very slight bleeding, but nothing of any importance.

In toxæmia cases one is most anxious about the mother's life. With treatment the foetus has a fairly good chance of surviving. In chronic nephritic subjects, on the other hand, the foetus seldom survives at the expense of the mother. Out of 5 cases of chronic nephritis attending the ante-natal clinic in 1933, 2 had still-born premature foetuses, and 3 had premature living babies, one of which died.

Conclusions.

The so-called "Toxæmia of Pregnancy," mild or severe, occurs in almost one-third of pregnant women. In fact, the more one sees of these cases, the more is one driven to the opinion that every pregnancy is potentially toxic. In other words, it is highly probable that the toxic substance, whatever it may be, is formed in every pregnancy. If the elimination of the toxic substance can be made to balance its manufacture, either naturally or with the help of treatment, then the patient remains well. The rate of manufacture of the toxin appears to increase as pregnancy goes on, therefore it becomes more difficult to keep the patient well in the later weeks. The chief organs upon which elimination depends are the kidneys. The toxic substance itself has injurious effects on the kidneys, either directly or through the increase in blood pressure. Therefore, if kidney damage occurs, elimination is interfered with, the toxic matter accumulates and a vicious circle is set up. Collapse of the excretory apparatus, as a result of this vicious circle, is naturally apt to be very rapid in cases where efforts have been made for some time to increase the excreting power of the kidneys. They are already giving their optimum output, and nothing further can be done to improve the conditions under which they are working.

Emptying of the uterus in order to stop the manufacture of the toxic matter is all that remains to be done once the vicious circle has commenced.

ORTHOPÆDIC AND ULTRA-VIOLET RAY CLINICS.

(By Dr. Jessie Eeles).

These Clinics were held during 1933 at the Principal Child Welfare Centre as in the previous year.

Orthopædic Clinic.

During 1933 the work of the Orthopædic Clinic continued on the same lines as before. Dr. Crockatt attended once a month to see cases requiring his advice and the Clinic was open daily for treatment. New cases were dealt with on Saturday mornings at 10 o'clock. During the year 118 Wakefield patients attended the Clinic. Of these, 62 were new cases and 56 were carried over from 1932. Of the 118, 71 remained on the Register at the end of 1933, 16 ceased attending, and 31 were discharged. The total attendances numbered 1,028. In addition to the Wakefield cases, 37 patients from outside the City attended by special arrangement. 30 of these were Tubercular cases from the West Riding. The total number of attendances put in by these 37 patients was 59.

The following is an analysis of the Wakefield cases treated in hospitals during 1933:—

	Cases remaining in Hospital at the end of 1932.	Admitted during 1933.	Discharged during 1933.	In Hospital at the end of 1933.
Education ...	1	6	4	3
Health	8	—	5	3
Mental and Child Welfare ...	2	2	1	3
Total ...	11	8	10	9

There were three Education cases on the waiting list at the end of 1933.

The following Table is a summary of the year's work of the Orthopædic Clinic:—

DEFECT.	New Cases.				Old Cases.				Seen by Orthopædic Officer.	Total Attendances.	Treatment Recommended.								Discharged.			Ceased Attending.	Remaining on Register.
	Total.	Education.	Health.	Mental and Child Welfare.	Total.	Education.	Health.	Mental and Child Welfare.			Observation.	Orthopædic Clinic.	Ultra-Violet Ray Clinic.	No Treatment.	Hospital.	Surgical Appliances.	X-Ray.	Plaster.	Cured.	Improved.	No Change.		
Rickets	2	—	—	2	7	4	—	3	9	17	2	—	5	2	—	1	—	—	2	1	—	1	5
Knock-Knee (not Rickets) ...	3	1	—	2	1	1	—	—	4	9	—	—	—	—	2	2	—	—	—	—	—	—	4
Bone and Joint Tuberculosis ...	2	—	2	—	8	—	8	—	10	21	2	—	—	2	—	4	—	1	—	2	1	—	7
Clubfoot	4	3	—	1	6	6	—	—	10	20	3	—	—	1	3	1	—	1	—	1	—	—	9
Congenital Dislocation of Hip Joints	1	—	—	1	2	—	—	2	3	11	—	—	—	—	2	1	—	1	—	—	—	1*	2
Other Congenital Deformities ...	2	1	—	1	1	—	—	1	3	3	—	1	—	2	—	—	—	—	1	—	2	—	—
Structural Scoliosis	2	2	—	—	2	2	—	—	4	41	2	2	—	—	—	—	—	—	—	—	—	—	4
Flatfoot	3	3	—	—	3	3	—	—	5	150	—	6	—	—	—	2	—	—	—	—	—	1	5
Infantile Hemiplegia and Little's Disease	4	2	—	2	4	3	—	1	8	15	3	—	—	1	2	1	—	1	—	1	—	—	7
Pes Cavus	1	1	—	—	—	—	—	—	1	7	—	—	—	—	1	—	—	1	—	—	—	—	1
Anterior Poliomyelitis	—	—	—	—	6	6	—	—	6	11	3	—	—	—	—	3	—	—	—	—	—	—	6
Erb's Paralysis	1	1	—	—	2	1	—	1	3	129	—	2	—	1	—	—	—	—	—	—	1	—	2
Postural Defects	11	11	—	—	4	4	—	—	3	345	—	15	—	—	—	—	—	—	1	4	—	4	6
Mouth Breather	18	17	—	1	1	1	—	—	—	204	—	19	—	—	—	—	—	—	3	1	—	8	7
Various	8	3	2	3	9	7	1	1	17	45	4	—	1	2	3	3	5	—	5	2	3	1	6
Total	62	45	4	13	56	38	9	9	86	1028	19	45	6	11	13	18	5	5	12	12	7	16	71

* Private Treatment.

ARTIFICIAL SUNLIGHT CLINIC.

The treatment of selected cases by Artificial Sunlight was continued at the principal Child Welfare Centre as in 1932. The accommodation and equipment were the same as before. New cases recommended for this form of treatment were seen on Saturdays at 10 a.m. Cases were selected from Schools, from the School Clinic, from the Orthopædic Clinic, from Child Welfare Centres, from the Tuberculosis Dispensary, and a few were sent by their private doctors. Six sessions were held weekly, four for boys and two for girls. The total number of attendances during 1933 was 5,433, and the following table gives a resume of the cases treated.

Defect.	Total Attendances.	Number of Cases.							Ceased to attend.		Discharged.	Remaining on Register.
		Total.	New.			Old.						
			Education.	Health.	Mental and Child Welfare.	Education.	Health.	Mental and Child Welfare.	After more than 10 Exposures.	After less than 10 Exposures.		
Rickets	934	44	5	—	21	6	—	12	3	3	8	30
Debility (with various symptoms) ...	1562	59	22	1	14	16	—	6	12*	1	14	32
Non-Pulmonary Tuberculosis ...	186	8	—	5	—	—	3	—	—	—	2	6
Cervical Adenitis (Non-Tubercular) ...	215	9	4	—	2	2	—	1	2	1	4	2
Bronchitis	823	28	12	—	4	10	—	2	4	3	5	16
Ophthalmia and Blepharitis ...	362	17	7	—	3	7	—	—	3	1	5	8
Skin Diseases (Various) ...	597	13	5	2	1	1	2	2	1	—	3	9
Alopecia (Areata and Diffusa) ...	240	5	3	—	—	1	—	1	1	—	3	1
Rheumatism and Chorea	158	7	5	—	—	2	—	—	—	—	4†	3
Nervousness ...	200	5	4	—	—	1	—	—	—	—	—	5
Chronic Suppuration ...	88	6	3	—	2	—	—	1	—	1	1	4
Various	68	4	1	—	2	—	—	1	2	—	2	—
Totals ...	5433	205	71	8	49	46	5	26	28	10	51	116

* One died of Scarlet Fever, two left the City.

† One discharged—unfit for treatment (Nephritis).

There follows a brief account of the results obtained in the cases that completed their course of treatment and were discharged during 1933. Children who for one reason or another ceased attending before they were discharged are not included. It is obvious that this account will therefore be somewhat optimistic in tone, as it is just the children who are benefiting from the treatment who are likely to continue to the end. At the same time it may be of use by showing in which types of cases improvement can be expected.

Rickets.

There is no need to say much about the value of Artificial Sunlight in this condition. 7 cases were treated—4 in the active stage and 3 with definite deformities. The active disease was soon cured, and nervous symptoms disappeared. With regard to deformities, lateral curvatures straighten more rapidly than anterio-posterior ones; bowlegs do better than knock-knees. All 7 children had Cod Liver Oil in addition to Ultra Violet Rays. The average gain in weight was 5½ lbs. The average course was just under a year.

Eye Cases.

Good results continue to be obtained in cases of Blepharitis and Recurrent Ophthalmia with Artificial Sunlight combined with local treatment and the use of plain tinted glasses followed by correction of the refractive error as soon as the eyes are fit to be tested. 7 children suffering from chronic blepharitis, recurrent styes, phlyctenular conjunctivitis or keratitis completed their course of treatment in 1933. All of them on discharge were satisfactory and had been so for some months previously. The average amount of school time lost by these children on account of their eyes was under two months.

Chronic Bronchitis.

5 cases were treated—all did well. Two were children of 12 and 13 years respectively where the bronchitis had persisted since infancy. Both had basal crepitations and one had clubbed fingers. In both the cough disappeared and the chest signs cleared up. One gained 7¼ lbs. in 12 months, and the other gained 9 lbs. 10 ozs. in 6 months. The improvement persisted after the Ultra Violet Ray treatment was stopped.

Cervical Adenitis.

7 cases were treated, 2 were tubercular and the others were inflammatory. One of the tubercular cases had post-operative treatment only. In the other case, the gland softened soon after

treatment was started, and an operation had to be performed. Post-operative treatment was then given with benefit. Of the remaining 5 cases, one had a sinus which had been discharging for two months before treatment was started. The original cause was a bad tooth, and there was much induration. The sinus healed up and the thickening completely disappeared. In the other 4 cases the glands disappeared, two of the children gained weight and improved greatly in health, but the other two failed to gain weight and their general condition remained about the same. Active tubercular adenitis does not, in my experience, do well under Artifiicial Sunlight except in association with surgical treatment. The other types of adenitis improve, as all chronic septic conditions do.

Debility.

Under this heading are grouped a number of children suffering from a variety of symptoms, the chief being lack of energy and failure to gain weight. Some are anæmic, some have cervical glands and discharging ears, some have slight coughs, some have nervous symptoms. In some cases the debility followed an illness such as Measles. As a rule the results obtained with this class of case are very variable and frequently disappointing. This year we seem to have been more fortunate in the children chosen for treatment, as all 10 who completed the course benefited considerably. The average gain in weight was 9 lbs. 3 ozs., and the average length of course was 13 months. It is noticeable that when one member of a family suffers from debility and improves with this type of treatment any other debilitated member of the same family is likely to benefit in a similar degree. There are several families in the City which are constantly represented at the Sunlight Clinic by at least one member. This most probably points to some deficiency either in the family or in the hygiene of the home.

Chorea.

3 cases were treated, one in the convalescent stage and two in the acute stage. All three did well. The two acute cases were back at school after 2 and 2½ months respectively. The average course was just over 6 months, and the average gain in weight was 8 lbs. 6 ozs.

Skin Conditions.

One case of Lupus was discharged in 1933. A patch, the size of a shilling, on one knee, had completely healed. Both local and general treatment were given. The course lasted 9 months. Three children with Diffuse Alopecia, following an acute illness, had Ultra Violet Ray treatment with remarkable results. The course lasted from 6 to 10 weeks. Local and general treatment was given. In every case the scalp had been plainly visible through the thin lifeless hair. On discharge the hair was growing in a thick mat all over. One case of Psoriasis was discharged during 1933. This was the one really successful case of this condition treated at the Ultra-Violet Ray Clinic. This child had had an 8 months' course of daily treatment in 1930, and at that time the rash, which had been generalised, cleared up except for a few pinhead spots on one elbow. The rash recurred after treatment at the Clinic was stopped, and treatment had to be resumed after 8 months. The condition did not respond till daily treatment was given, and the skin then cleared rapidly. Treatment was interrupted by an attack of Scarlet Fever, and the disease was once more generalised when the patient re-appeared at the Ultra-Violet Ray Clinic. Daily treatment was resumed, and in 2 months the skin was almost clear. In another month no lesions at all were to be seen, and twice weekly treatment could be resumed. Except for the occasional appearance of a pin head sized spot, the skin remained quite clear till treatment had to be discontinued on the child leaving school. The second course lasted 19 months, and the child gained 9 lbs. 2 ozs. This was a backward child who did not like school and who enjoyed coming to the Sunlight Clinic. This fact would seem to bear out the contention of some authorities that Psoriasis has a psychological basis.

Pink Disease.

Two cases were successfully treated. In both cases the Sunlight treatment was of secondary importance to the diet. One was in the acute stage when treatment was begun, and the other was convalescent. In the former case, after 5 months the child was attempting to walk and was firm and lively, and had gained 5 lbs. 3 ozs. The second case was interesting. The child was still irritable and still had some œdema of the extremities when he came to the Sunlight Clinic. His muscles were toneless and flabby, and the child, though 13 months old, was making no attempt to sit up. His ligaments were so loose that one could arrange him in the most grotesque attitudes without causing the least discomfort. After 6 months the symptoms of pink disease had disappeared, but he was as flabby and inert as ever. Although there were no signs of cretinism, he was given half a grain of thyroid daily, and within the next 6 months his joints had firmed up and he was able to walk with support. Unfortunately no X-Ray photographs of his bones were taken.

JESSIE EELES.

MENTAL DEFICIENCY.

At the end of 1933, there were 83 mental defectives (37 males and 46 females) on the Register of the Mental Deficiency Authority, and this list of cases does not include children coming under the jurisdiction of the Education Authority. They are classified as follows:—

		Total.	Males.	Females.
Under Orders	In Institutions ...	25	10	15
	Under Guardianship	2	2	—
Under Statutory Supervision ...		17	12	5
Poor Law Cases	In County Institution ...	1	—	1
	In Children's Homes ...	1	—	1
	In other Mental Deficiency Institutions (maintained there by Public Assistance Committee) ...	3	2	1
	Outdoor Relief Cases	5	1	4
Under Voluntary Supervision ...		29	10	19
Total		83	37	46

In addition to the above, there were 102 children (56 boys and 46 girls) between the ages of 7 and 16 years, who had been certified to the Education Authority as feebleminded. Of these, 73 were attending ordinary schools, 1 was in an Institution, and 28 were not attending any school. As there is no Special School for feebleminded children, the only cases which can be referred by the Education Committee to the Mental Deficiency Committee are those who have been certified uneducable in a Special School, that is, idiots and imbeciles.

St. Catherine's Home for the Feebleminded.

During 1933, 4 Wakefield patients (2 males and 2 females) were admitted to St. Catherine's Home, 2 being admitted from their homes, one from the County Children's Homes, and one from Dr. Barnardo's Homes.

At the end of the year, 20 mental defectives belonging to Wakefield were inmates of St. Catherine's Institution, and were graded as follows:—

High Grade Boys (under 16 years of age) ...	4
Low Grade Males	1
High Grade Female Adults	13
Low Grade Females	2

The Occupation Centre.

The Occupation Centre is managed on behalf of the Corporation by the Social Service Council, and Mr. Osbourn, the Secretary, has kindly supplied me with the following remarks:—

> "The Centre has steadily pursued its work throughout "the year. In May a removal was made to Service "House when the Council of Social Service changed its "headquarters, and the young folk have now settled down "quite comfortably in their new home.
>
> "Opportunity was again taken when school children "were at Mappleton Camp during the summer to give "the young people a day's outing to the seaside. They "were taken to Mappleton in private cars, kindly lent for "the occasion, and they enjoyed both the journey and the "time spent at the camp. A party at Christmas was also "thoroughly enjoyed.
>
> "A few changes have taken place during the year. "At the close there were nine young people in regular "attendance — five boys and four girls. Handwork "adapted to individual ability is the main occupation, "though domestic work, personal hygiene, and music have "their place in the regular routine.
>
> "Progress is inevitably slow, yet definite improvement "is evident in several instances. Things made or work "done may be of the simplest, but there is a real pride "in the achievement, and the consciousness of power to "do something is of real value. There are disappointments "and failures, though these can often be traced to a bad "home influence."

SCHOOL MEDICAL SERVICE.

This service is intimately correlated with the general public health service. The medical work is carried out by the Medical Officer of Health, and the two Assistant Medical

Officers, and the work of the School Nurses is carried out by the six Health Visitors. In addition, there is a School Dentist, a School Clinic Nurse, and an Orthopædic Clinic Nurse. The work embraces (1) Routine medical inspection of entrants, intermediates and leavers; (2) Supplementary medical inspection in the schools and at the School Clinic, including special examinations re Mental Deficiency, etc.; (3) Treatment of minor ailments at the School Clinic; (4) Vision refraction and prescribing of spectacles at the Ophthalmic Clinic; (5) Dental inspection and treatment; (6) Orthopædic and ultra-violet Ray Treatment; (7) Cleanliness Surveys and the following up of defective children by the School Nurses.

During 1933, the number of medical examinations amounted to 11,228, and 9,536 medical certificates were issued. At the Ophthalmic Clinic, 567 new cases were examined, with 1,109 attendances, and 517 prescriptions for spectacles were issued. The School Dentist inspected the teeth of 8,061 children, and found that 5,714 required treatment, although only 2,345 actually attended at the Dental Clinic for treatment. 118 children attended the Orthopædic Clinic, with 1,028 attendances, whilst 205 children attended the Ultra-violet Light Clinic, with 5,433 attendances. At the Central Clinic for Minor Ailments, 1,003 children made 16,607 attendances, and at the Snapethorpe School Clinic, 336 children made 2,229 attendances. The School Nurses made 11,198 examinations with regard to cleanliness and condition of clothing and footgear.

The records of the routine medical examination of elementary school children showed that 79 per cent. had carious teeth, 25 per cent. defective vision, 16 per cent. disease of throat and nose, 14 per cent. of the girls had verminous heads, 10 per cent. diseases of the lungs (mostly bronchitis), 8 per cent. enlarged glands (mostly cervical), 4 per cent. external disease of the eyes, 3 per cent. dull and backward, 2 per cent. defective hearing, 2 per cent. defective nutrition, and less than one per cent. each, tuberculosis, mental deficiency, defective clothing and footgear. 15 per cent. were free from any defect. 21 per cent. were referred for treatment other than dental treatment, and 81 per cent. of these received treatment.

HEALTH EDUCATION.

As usual, the arrangements for Health Week were made by the Social Service Council, and Mr. Osbourn has kindly supplied the following Report:—

" The Council was again entrusted with the task of " organising Health Week; this was held in October. At " first it looked as though a well-worn subject—'The " Prevention of Tuberculosis'—had been chosen, but Dr. " Harley Williams, Medical Commissioner to the National " Association for the Prevention of Tuberculosis, who spent " nearly the whole week in Wakefield giving lectures and " cinema displays to both adults and young people, made his " subject so positive and alive with advice on everyday life " and conduct as to dispel any fears that hardworn ground " was being recovered. A crowded week of meetings was " most successful.

" The usual important work in the schools was carried " out in co-operation with the Director of Education and the " Medical Officer of Health. 'Communicable Diseases and " how to avoid them' was the subject dealt with, and at the " close of the week an essay competition was conducted in " the senior schools.

" Social Hygiene.

" A new departure in Social Hygiene work was under- " taken in November with great success. Instead of " arranging the usual cinema displays the Council obtained " the services of Mr. Percy Lee, Education Officer to the " British Social Hygiene Council, for a week. By arrange- " ment with local bodies holding regular weekly meetings a " number of these were addressed by Mr. Lee on 'The Place " of Sex in Life' and similar subjects. His addresses were " instructive and interesting, and on several occasions evoked ' considerable discussion.

" Mr. Lee also gave three lectures at Service House to " school teachers on 'Biology in Schools.' These were well " attended, and it was evident from the discussions which " followed that the lectures had been of great value."

The distribution of the local edition of " Better Health " (1,000 copies monthly) was continued during the year.

BLINDNESS.

I am indebted to the Secretary-Home-Teacher of the Wakefield Institution for the Blind for the following information:—

(*a*) Total number of blind persons on the Register at 31st December, 1933	101
(*b*) Distribution of the number given in (*a*):—	
Children under 5 years of age	1
Children awaiting admission to Special Schools	—
Children in Special Schools	7
Adolescents undergoing training	5
Adults undergoing training	—
Workshop employees	2
Inmates of "Child Memorial" Home for the Blind	6
Inmates of Institutions	3
Adolescents and Adults residing in own homes	77
	101

Table showing age distribution of cases on the Register:—

	0—5 years.	5—16 years.	16—21 years.	21—30 years.	30—40 years	40—50 years.	50—60 years.	60—70 years.	70—80 years.	80 yrs. and over.	Total.
Males ...	1	3	1	2	3	8	15	12	8	1	54
Females ...	—	4	4	—	2	8	7	16	6	—	47
Total ...	1	7	5	2	5	16	22	28	14	1	101

No. of Visits to persons in own homes	2124
Lessons to persons in own homes	225
Pastime classes	41
Social Gatherings	17
Persons in receipt of Domiciliary Assistance	49

"A Home Workers' Scheme was inaugurated in
"January, 1933, and 5 Home Workers were admitted to
"the Scheme, 1 male and 4 females, the women as
"circular machine-knitters and cane-seaters, the man as
"a teacher of the piano, tuner, and repairer. It not
"being convenient for the women to work in their own
"homes, a room in the old Workshops for the Blind is
"used as a Home Workers' Centre for Machine-knitting
"and Chair-seating."

"During the year 17 Social Gatherings were held. "5 events took place out-of-doors during the summer, "on two occasions at private gardens as the guests of "Mr. and Councillor Mrs. Stott, Westfield, and Mrs. "Kilburn, Sandal, two at Holmfield Park, and a picnic by "bus to Knaresborough."

"In July, Dr. C. G. Kay Sharp was appointed "Certifying Ophthalmic Surgeon to the Wakefield Blind "Welfare, and the referee panel of the Northern Counties "Association for the Blind has been adopted. 9 Clinics "have been held by Dr. Sharp, and 42 persons examined."

Prior to the appointment of Dr. Kay Sharp, Dr. Allardice examined and reported on 4 cases.

So far as I know, no special action has been taken under Section 66 of the Public Health Amendment Act, 1925, but the prevention of blindness has always received attention from the Corporation, particularly in connection with the prevention and treatment of ophthalmia neonatorum, which in the past has contributed considerably to the number of blind persons. There has, however, been no instance of blindness resulting from this disease in Wakefield for 16 years. The attention of the Education Committee has also been drawn to the great need for special educational facilities for school children suffering from high Myopia (or severe short-sightedness), which sometimes ends in blindness. These children cannot be safely educated in ordinary classes, they are not bad enough to be admitted to blind schools, but should be educated by special methods.

The following is a list of the main causes of blindness found amongst the 46 cases which were examined during the year:—

Primary cataract	7
Syphilis (congenital 4, acquired 2)	6
Congenital, hereditary, and developmental defects	5
Industrial Trauma	4
Secondary cataract following chronic nephritis ...	1
Optic atrophy	2
Diabetes	2
Ophthalmia Neonatorum	2

Primary Glaucoma	2
Detached retina	1
Child—hit with stone in left eye	1
Primary cataract (right eye), blow with fist (left eye)	1
Septicæmia (left eye), stated to be due to vaccination (right eye)	1
Not stated	1

The two persons in whom the cause of blindness was Ophthalmia Neonatorum were aged 48 years and 52 years, respectively.

METEOROLOGICAL TABLE, 1933.

	BAROMETER CORRECTED.					TEMPERATURE.										RAINFALL.				SUN-SHINE HOURS.
	Mean 9 a.m.	Maximum Reading.	Date.	Minimum Reading.	Date.	Mean 9 a.m.	Highest Maximum.	Date.	Lowest Minimum.	Date.	Subsoil 6 ins.	Subsoil 1 foot.	Subsoil 2 ft.	Subsoil 4 ft.	Subsoil 20 ft.	Total Inches.	Greatest Quantity in 24 hours.	Date.	No. of days on which .01 or more fell.	
January ...	30.124	30.775	24th	29.456	16th	34.3	55.3	2nd	15.5	23rd	35.1	37.5	39.6	43.0	49.6	1.88	0.80	15th	15	16.3
February ...	29.936	30.579	13th	29.197	1st	38.7	56.9	8th	21.0	20th	36.6	37.8	38.9	41.3	49.1	4.30	1.52	25th	17	60.2
March ...	29.895	30.412	27th	29.039	17th	43.1	65.9	28th	25.3	26th	38.7	40.7	41.2	41.8	48.5	2.12	0.62	17th	14	127.8
April ...	30.087	30.517	14th	29.731	29th	50.1	68.8	17th	29.8	23rd	45.6	45.7	45.3	44.2	47.9	1.56	0.63	29th	9	111.1
May ...	29.971	30.219	18th	29.490	7th	55.4	74.8	22nd	37.7	15th	52.1	52.5	51.4	48.2	47.4	2.45	0.67	6th	20	119.0
June ...	29.871	30.323	9th	29.204	18th	63.6	85.4	5th	39.8	12th	59.0	59.3	58.0	53.6	47.3	0.99	0.23	12th	9	206.5
July ...	29.999	30.533	4th	29.468	14th	66.5	88.6	3rd	47.0	30th	62.5	62.9	61.6	57.1	47.7	2.29	0.65	15th	14	206.7
August ...	30.022	30.333	3rd	29.633	23rd	66.4	87.5	28th	46.2	17th	62.0	62.4	62.0	58.6	48.3	0.41	0.08	21st	10	208.3
September	30.088	30.451	8th	29.478	24th	59.5	80.6	4th	35.3	16th	56.7	58.0	58.8	57.5	49.1	1.60	0.92	24th	9	142.0
October ...	29.888	30.420	3rd	29.034	28th	51.4	67.8	6th	33.5	28th	49.3	51.6	53.5	54.4	49.9	4.10	1.03	7th	19	59.5
November	29.962	30.248	8th	29.307	15th	42.2	54.5	7th	25.9	13th	41.4	44.2	46.5	49.3	50.4	2.04	0.86	15th	19	32.5
December	30.216	30.745	3rd	29.196	28th	35.0	44.7	15th	21.8	6th	35.5	38.4	41.0	44.7	50.6	0.52	0.08	8th	15	9.4
Whole Year	30.005	30.775	24th Jan.	29.034	28th Oct.	50.5	88.6	3rd July	15.5	23rd Jan.	47.9	49.3	49.8	49.5	48.8	24.26	1.52	25th Feb.	170	1299.3 Mean 3.56 per day.

No. of days with Sunshine (0.1 hours or over): 280. No. of days when Sun registered but less than 0.1 hour: 11.
Lowest temperature on grass: 12.2 deg. (23rd January). Sunless days: 74.

I am indebted to Mr. Ormond, of the Parks Department, for the Table given above.